

Project No. 1251-100

Crude Oil Tank Farms Project, Agrood Area 30 (Module-1)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

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| 2 | Ready for Startup Certificate (RFSU) | |
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Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
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| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

1-Mechanical Completion Certificate (MCC)



SYSTEM MECHANICAL COMPLETION CERTIFICATE (MCC)

PROJECT TITLE : CRUDE OIL TANK FARM PROJECT (AGROOD AREA)

PROJECT No : 01251-100

SYSTEM NAME : Plant Area Lighting and Small Power System

SYSTEM ID : 030-EL-014

THIS IS TO CERTIFY THAT:

- THE ABOVE SYSTEM HAS BEEN FABRICATED, ERECTED, INSTALLED AND TESTED TO THE REQUIREMENTS OF THE CONTRACT DRAWINGS, SPECIFICATIONS, THE APPLICABLE CODES AND STANDARDS.
- ALL PRE-COMMISSIONING RELEVANT ACTIVITIES, TESTS, INSPECTIONS AND CHECKS HAVE BEEN CARRIED OUT FOR THIS SYSTEM AND FOUND ACCEPTABLE.
- Q/C DOCUMENTATION OF THE ABOVE SYSTEM HAS BEEN AUDITED BY THE CUSTOMER SITE QUALITY CONTROL AND FOUND COMPLETED.
- ALL PUNCH LIST ITEMS CATEGORY (A) IN THIS SUBSYSTEM WERE CLEARED.
- THIS SYSTEM IS MECHANICALLY COMPLETED ON THE DATE AND READY FOR COMMISSIONING (RFC) WITH THE FOLLOWING EXCEPTIONS.

EXCEPTIONS :

| COMPANY | PETROJET | ENPPI | PMC |
|-----------|-----------------|------------------|-----------------|
| NAME | Sobhy Seleem | Mohamed Abbass | Mohamed Ibrahim |
| TITLE | Qc ESI engineer | Construction Mgr | Elec. engineer |
| SIGNATURE | | | |
| DATE | 3/10/2021 | | |

SYSTEM MECHANICAL COMPLETION CERTIFICATE (MCC)

PROJECT TITLE : CRUDE OIL TANK FARM(AGROOD AREA)

PROJECT No : 1251-100

SYSTEM NAME : Plant Area Lighting and Small Power System

SYSTEM ID : 030-EL-014

THIS IS TO CERTIFY THAT:

- THE ABOVE SYSTEM HAS BEEN FABRICATED, ERECTED, INSTALLED AND TESTED TO THE REQUIREMENTS OF THE CONTRACT DRAWINGS, SPECIFICATIONS, THE APPLICABLE CODES AND STANDARDS.
- ALL PRE-COMMISSIONING RELEVANT ACTIVITIES, TESTS, INSPECTIONS AND CHECKS HAVE BEEN CARRIED OUT FOR THIS SYSTEM AND FOUND ACCEPTABLE.
- Q/C DOCUMENTATION OF THE ABOVE SYSTEM HAS BEEN AUDITED BY THE CUSTOMER SITE QUALITY CONTROL AND FOUND COMPLETED.
- ALL PUNCH LIST ITEMS CATEGORY (A) IN THIS SUBSYSTEM WERE CLEARED.
- THIS SYTEM IS MECHANICALLY COMPLETED ON THE DATE AND READY FOR COMMISSIONING (RFC) WITH THE FOLLOWING EXCEPTIONS.

EXCEPTIONS :

Partial for tank 03 & tank 04

NOTE: ACCEPTANCE OF THE ABOVE SYSTEM DOES NOT RELIEVE ENPPI/CONSTRUCTION CONTRACTOR FROM THEIR CONTRACTUAL OBLIGATIONS AND RESPONSIBILITIES.

| COMPANY | PETROJET | ENPPI | PPC |
|-----------|----------|---------------|-----|
| NAME | | Mohamed Abbas | |
| TITLE | | | |
| SIGNATURE | | | |
| DATE | | | |



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
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| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

2- Ready for Startup Certificate (RFSU)

READY FOR START UP CERTIFICATE

PROJECT TITLE : EGPC CRUDE OIL TANK FARMS PROJECT (AGROOD-30)

PROJECT No. : 1251-100

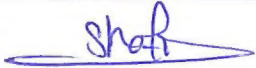
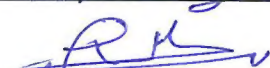

SYSTEM /AREA /PLANT : Plant Area Lighting and Small Power System

SYSTEM /AREA /PLANT No. : 030-EL-014

THIS IS TO CERTIFY THAT:

- THE MENTIONED SYSTEM /AREA /PLANT IS READY FOR START UP WHERE ALL MECHANICAL WORKS, PRECOMMISSIONING AND COMMISSIONING ACTIVITIES HAVE BEEN SUCCESSFULLY COMPLETED.
- MECHANICAL COMPLETION CERTIFICATE(S) FOR THE MENTIONED SYSTEM / AREA / PLANT HAVE BEEN SIGNED.
- ISSUANCE OF THIS READY FOR START UP CERTIFICATE(S) SHALL NOT RELIEVE CONTRACTOR(S) FROM THEIR OBLIGATIONS TO COMPLETE THE REMAINING SYSTEMS NOR FROM THEIR WARRANTY OBLIGATIONS AND OTHER PROVISIONS OF THE CONTRACT.
- THE FOLLOWING EXCEPTIONS AGREED TO BE CLEARED AFTER START UP AND WILL NOT PREVENT START UP ACTIVITIES.

EXCEPTIONS :

| COMPANY | ENPPI | PPC |
|-----------|---|---|
| NAME | Ahmed El shafie | Mohamed Ibrahim |
| TITLE | Commissioning Manager | Elc. manager |
| SIGNATURE |  |  |
| DATE | 10.10.21 |  |






Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
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| System Description | Plant Area lighting and small Power System |

3- System Punch Lists



| COMPANY | PTJ | ENPPI | PMC |
|---------|---|---|---|
| NAME | Sabhy Seelan |  |  |
| SIGN. |  | | |
| DATE | 30-5-2021 | | |



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



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|--------------------|--|
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4- System Limits Marked Up P&ID

| | |
|--------------------|--|
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5- System Index



Project: 01251-100
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6- Piping Pre-Commissioning



Project: 01251-100
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| | |
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6.01- Piping Test Packs



Project: 01251-100
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| | |
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6.02- Piping Pre-commissioning Check Lists



Project: 01251-100
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| | |
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7- Piping Commissioning



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



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| System Description | Plant Area lighting and small Power System |

7.01- Service Test, GLT, CLT and N2 Purging Certificates



Project: 01251-100
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| | |
|--------------------|--|
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| System Description | Plant Area lighting and small Power System |

7.02- Piping Commissioning Check Lists

| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

8- Mechanical pre-Commissioning



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
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| System Description | Plant Area lighting and small Power System |

8.01- System Mechanical Index



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
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8.02- Equipment Drawings



Project: 01251-100
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| | |
|--------------------|--|
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8.03- Equipment Datasheets



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



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|--------------------|--|
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8.04- Boxing-up Certificates



Project: 01251-100
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| | |
|--------------------|--|
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8.05- Grouting Certificates



Project: 01251-100
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| | |
|--------------------|--|
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8.06- Pre-Alignment Certificates



Project: 01251-100
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| | |
|--------------------|--|
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8.07- Mechanical Pre-Commissioning Checklists



Project: 01251-100
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| | |
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9- Mechanical Commissioning



Project: 01251-100
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| | |
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9.01- Final Alignment Certificates



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9.02- Motor Solo Run Certificates



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9.03- Mechanical Run Test (MRT) Certificates



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9.04- Mechanical Commissioning Checklists



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9.05- Mechanical Supplier Check Lists & Reports



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10- Instrumentation Pre-Commissioning



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|--------------------|--|
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10.01- System Instrument Index



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10.02- Instrument Data Sheets



Project: 01251-100
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| System ID | 030-EL-014 |
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10.03- Instrument Cable Schedule



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
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10.04- System Instrumentation Wiring Diagram



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



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|--------------------|--|
| System ID | 030-EL-014 |
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10.05- Hook-up Drawing (Mechanical & Pneumatic)



Project: 01251-100
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| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

10.06- Instruments Cables Schedule



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

10.07- Instruments Cables Laying Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

10.08- Instruments Cables Termination Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

10.09- Instruments Cables Testing Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
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10.10- Instruments Calibration Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
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10.11- Instrument Loop Checks Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



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|--------------------|--|
| System ID | 030-EL-014 |
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10.12- Instrumentation Pre-Commissioning Check Lists



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CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

10.13- Instrumentation Supplier Check Lists & Reports



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CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
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11- Instrumentation Commissioning



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
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11.01) Instrumentation Function Test Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

11.02- Instrumentation Supplier Check Lists & Reports

| | |
|--------------------|--|
| System ID | 030-EL-014 |
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12- Electrical Pre-Commissioning



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

12.01- System Electrical Index

[illegible]

| | | | | | | |
|------------|--|------------|---------------------|----------|-----------|---------|
| 030-EL-014 | Plant Area lighting and small Power System | Electrical | • P2-030-LPDP-CR-1B | LV Cable | Checklist | EL-31 A |
| 030-EL-014 | Plant Area lighting and small Power System | Electrical | • P2-030-WR-1 | LV Cable | Checklist | EL-31 A |
| 030-EL-014 | Plant Area lighting and small Power System | Electrical | • P2-030-WR-2 | LV Cable | Checklist | EL-31 A |
| 030-EL-014 | Plant Area lighting and small Power System | Electrical | • P3-030-LPDP-CR-1 | LV Cable | Checklist | EL-31 A |
| 030-EL-014 | Plant Area lighting and small Power System | Electrical | • P3-030-LPDP-CR-2 | LV Cable | Checklist | EL-31 A |
| 030-EL-014 | Plant Area lighting and small Power System | Electrical | • P3-030-LPDP-CR-3 | LV Cable | Checklist | EL-31 A |
| 030-EL-014 | Plant Area lighting and small Power System | Electrical | • P3-030-LPDP-CR-4 | LV Cable | Checklist | EL-31 A |

| | |
|--------------------|--|
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12.02- Electrical Drawings

SEE DETAIL "B"

030-T10-CPTR

WT-05

AG030-TR-001

FROM EL.100.000
TO EL.102.000

030-T-10

LPDP

AG030-TR-006

SEE DETAIL "C"

SEE DE

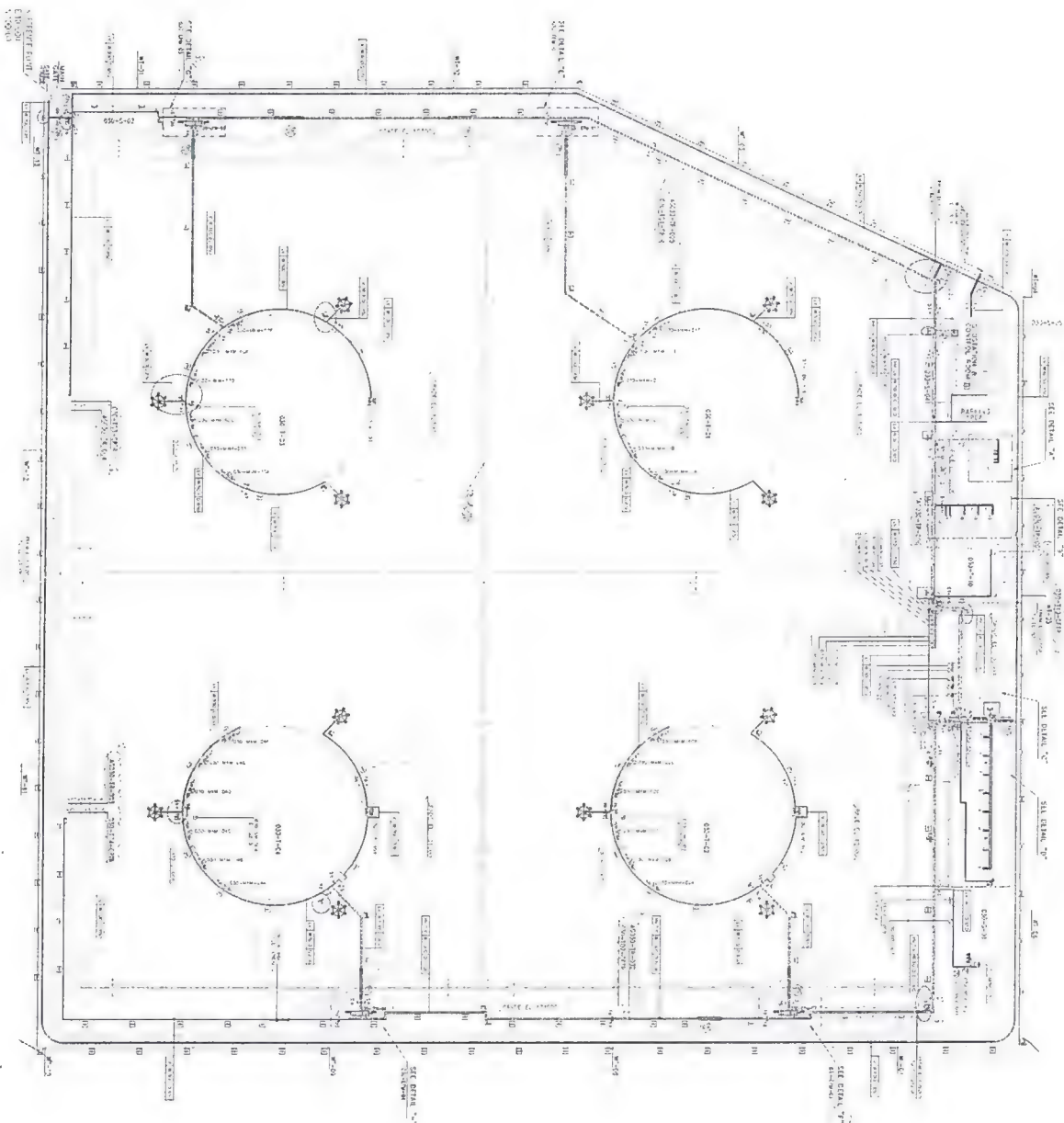
102000

030-MOV-080

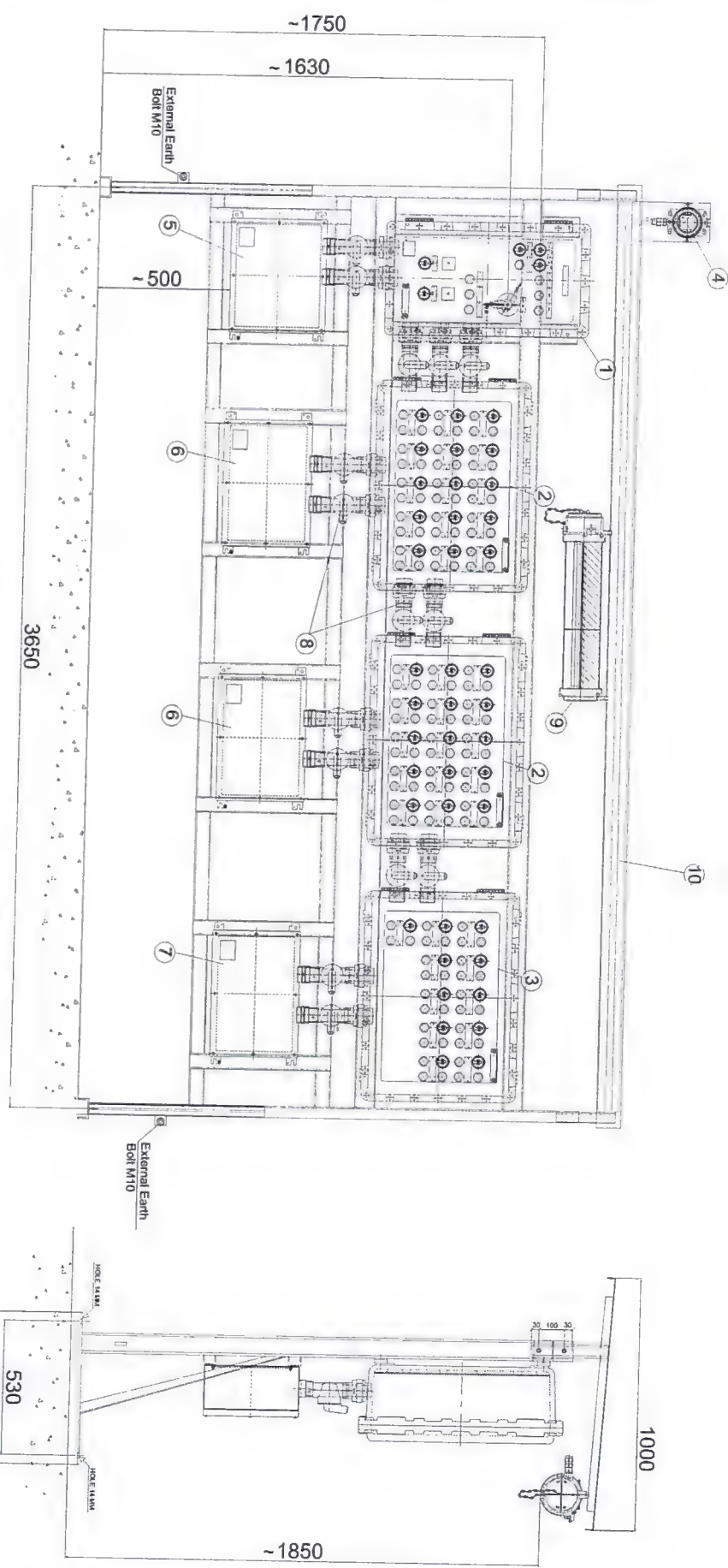
030-MOV-215

030-MOV-2

030-SDV-105



General Note:
 Except otherwise writing, all the quotes are expressed in millimeters
 with the following tolerances:
 - up to 6mm: ± 0.2mm
 - over 6 and up to 30mm: ± 0.5mm
 - over 30 and up to 100mm: ± 0.8mm
 - over 100 and up to 300mm: ± 1.2mm
 - over 300 and up to 1000mm: ± 2mm
 - over 1000mm: ± 3mm
 - angles: ± 1°



NOTE:
 - TECHNOR-ITALSMEA WILL SUPPLY THE STRUCTURE WITH ALL ENCLOSURES MOUNTED AND WIRED.
 - CANOPY WILL BE SHIPPED SEPARATLY UNASSEMBLED
 - SEALING OF JOINTS BETWEEN ENCLOSURES SHALL BE COMPLETED BY CLIENT BEFORE COMMISSIONING AT SITE

Explosion Proof
 Electrical Equipment
Technor ITALSMEA
 A company of IMARCHEAL ELECTRIC GROUP

Project: EGPC CRAUDE OIL TANK FARM

Client: ENPPI

P.O. n° 1251-100-520-01-25

M.R. n° 01251-100-520-01-P

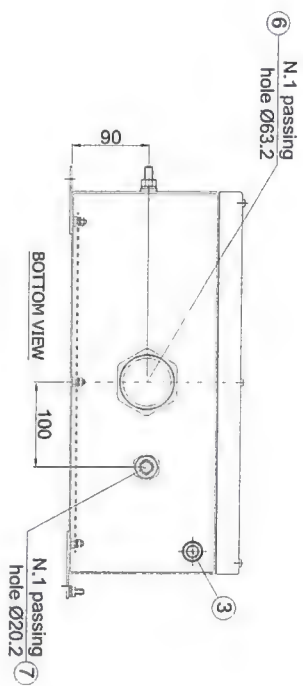
| ITEM | DESCRIPTION | QTY | MANUFACTURER |
|------|---|-----|------------------|
| 10 | HIG Steel Reinforcing frame + canopy (supplied) | 1 | TECHNOR-ITALSMEA |
| 9 | LED Tube Lighting fixture 2x18W | 1 | TECHNOR-ITALSMEA |
| 8 | Set of Three pieces union ZN107 and horizontal sealing flange | 15 | BM&G/TESSA |
| 7 | ASIS18L ENCLOSURE | 1 | TECHNOR-ITALSMEA |
| 6 | ASIS18L ENCLOSURE | 2 | TECHNOR-ITALSMEA |
| 5 | ASIS18L ENCLOSURE | 1 | TECHNOR-ITALSMEA |
| 4 | ALUMINIUM ENCLOSURE | 1 | TECHNOR-ITALSMEA |
| 3 | ALUMINIUM ENCLOSURE | 1 | TECHNOR-ITALSMEA |
| 2 | ALUMINIUM ENCLOSURE | 2 | TECHNOR-ITALSMEA |
| 1 | ALUMINIUM ENCLOSURE | 1 | TECHNOR-ITALSMEA |

Di disegnano e provvede a fornire al cliente il disegno con diritto di riproduzione anche in parte o di renderlo noto a terzi senza nostra autorizzazione scritta.

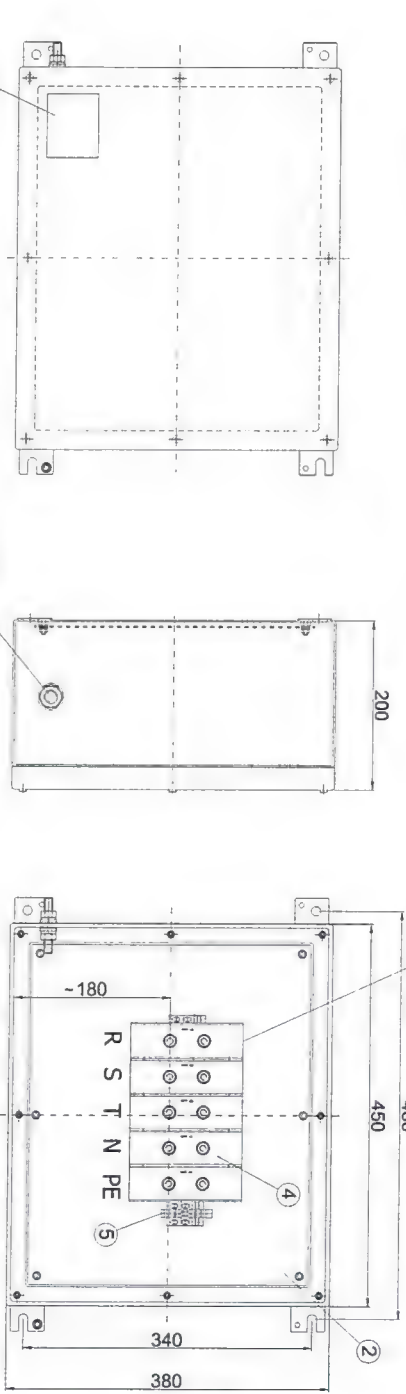
We reserve the ownership under the law of this drawing with prohibition of any partial reproduction and to make it known to third persons without our written authorization.

UNI A3 (297x10mm)

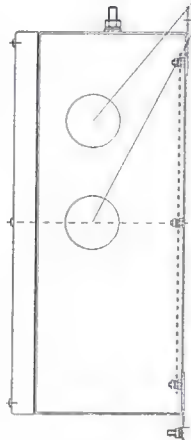
CABLE GLANDS
SUPPLIED LOOSE



NOTE FOR TECHNOR'S WORKSHOP:
PLEASE MOUNT THE TERMINALS
AS HIGH AS YOU CAN



N.2 passing
holes Ø63.2
(for interconnection)



- NOTE:
- EXECUTION: ATEX II 2GD Ex eb IIC
 - DEGREE OF PROTECTION: IP66
 - VOLTAGE: 400Vac 50/60Hz
 - CURRENT: 160A
 - AMBIENT TEMPERATURE: -20/+50°C
 - EXTERNAL PAINT: UNPAINTED
 - INTERNAL PAINT: UNPAINTED

General Note:
Except otherwise writing, all the quotas are expressed in millimeters
with the following tolerances:
- up to 6mm: ± 0.2mm
- over 6 and up to 30mm: ± 0.5mm
- over 30 and up to 100mm: ± 0.5mm
- over 100 and up to 300mm: ± 1.2mm
- over 300 and up to 1000mm: ± 2mm
- over 1000mm: ± 3mm

Explosion Proof
Electrical Equipment
Material Elettrici Antideflagranti
Technor ITALSMEA
A company of MARCHEAL ELECTRIC GROUP

Project
EGPC CRUDE OIL TANK FARM

CLIENT
ENPPI

Description
P.O. n°
1251-100-520-01-25

M.E. n°
01251-100-520-01-P

| ITEM | DESCRIPTION | Q.TY | NOTES | MANUFACTURER |
|------|---|------|-------|------------------|
| 8 | POLYESTER SELF-ADHESIVE CERTIFICATION LABEL | 1 | | TECHNOR-ITALSMEA |
| 7 | BRASS NICKEL CHROME DOUBLE SEAL | 1 | | BIMEDITEKNIK |
| 6 | BRASS NICKEL CHROME DOUBLE SEAL | 1 | | BIMEDITEKNIK |
| 5 | CABLE GLAND M63 FOR ARMoured CABLE (FOR MCCB FAULT SIGNAL) | 2 | | WEIDMULLER |
| 4 | TERMINAL BLOCK (BOLT TYPE - M10) SUTTABLE FOR 185sqmm CABLE | 5 | | WFF-120 |
| 3 | ALU310L DRAIN VALVE | 1 | | ECR 3 |
| 2 | ALU310L INTERNAL MOUNTING PLATE | 1 | | PS-3845 |
| 1 | ALU310L ENCLOSURE (WITHOUT HINGES) | 1 | | SB-384520 |

Dwg. No.
B050X12221742

Drawn: Vaccelluzzo
Appr: Roncoroni
Date: 26/06/2020
Rev: 3
S.O. E-2000253

Clientem la provedea a termenii de legare a acestui design con dectio de alipodato anche in parte o di invio.

Tutti i diritti sono riservati e sono protetti dalla legge.

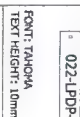
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UNI A3 (297x210mm)

CC70003

TOP VIEW

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| | | | | | | | |
|-------------|--------------------------|---------|--------------------|----------|---------------|-------|------------|
| Project | EGPC CRUDE OIL TANK FARM | Client | ENPPI | Dwg. No. | B050X12221742 | Sh. | 4 |
| Description | | P.O. n° | 1251-100-520-01-25 | Drawing | Vaccilluzzo | Order | MATASSA |
| | | M.R. n° | 01251-100-520-01-P | Appr. | Romcoroni | Date | 26/06/2020 |
| | | | | Scale | 1 | Rev. | 3 |
| | | | | | | S.O. | E-2000253 |
| | | | | | | | 18 |

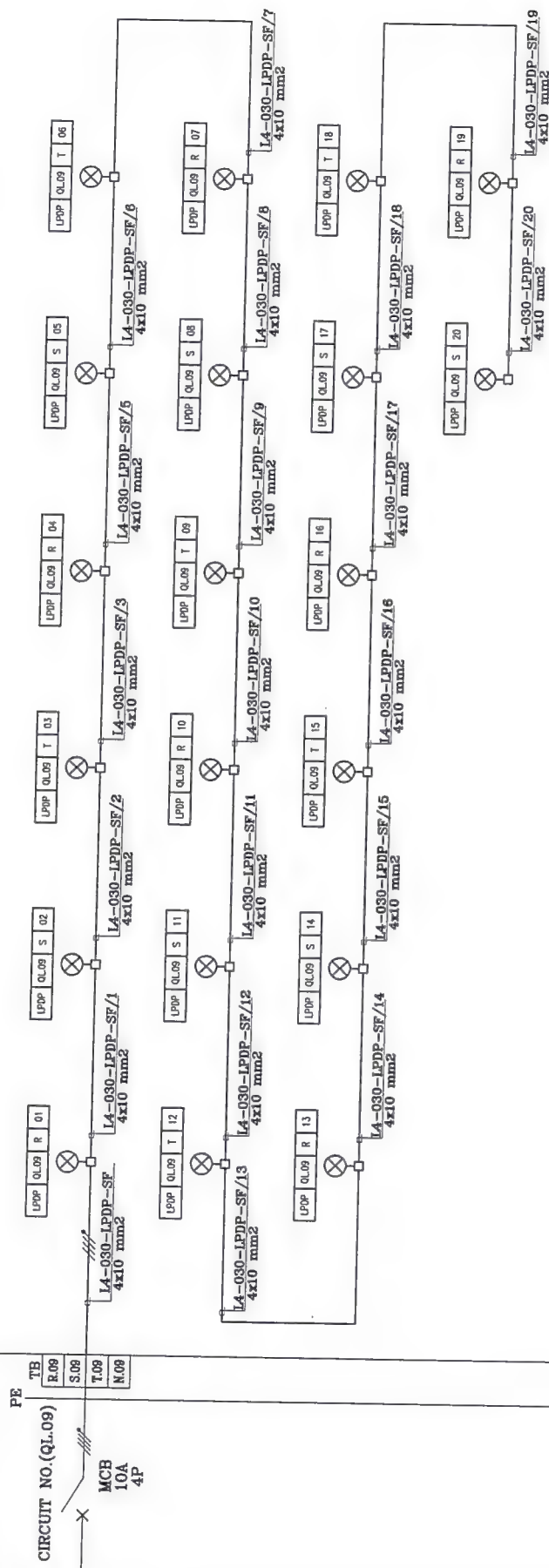
**Explosion Proof
Electrical Equipment**

**Explosion Proof
Electrical Equipment**
Materiali Elettrici Antideflagranti

Technor ITALSMEA
A company of MARECHAL ELECTRIC GROUP

FA

OUTDOOR LIGHTING AND
POWER DISTRIBUTION PANEL
(030-LPDP-1)



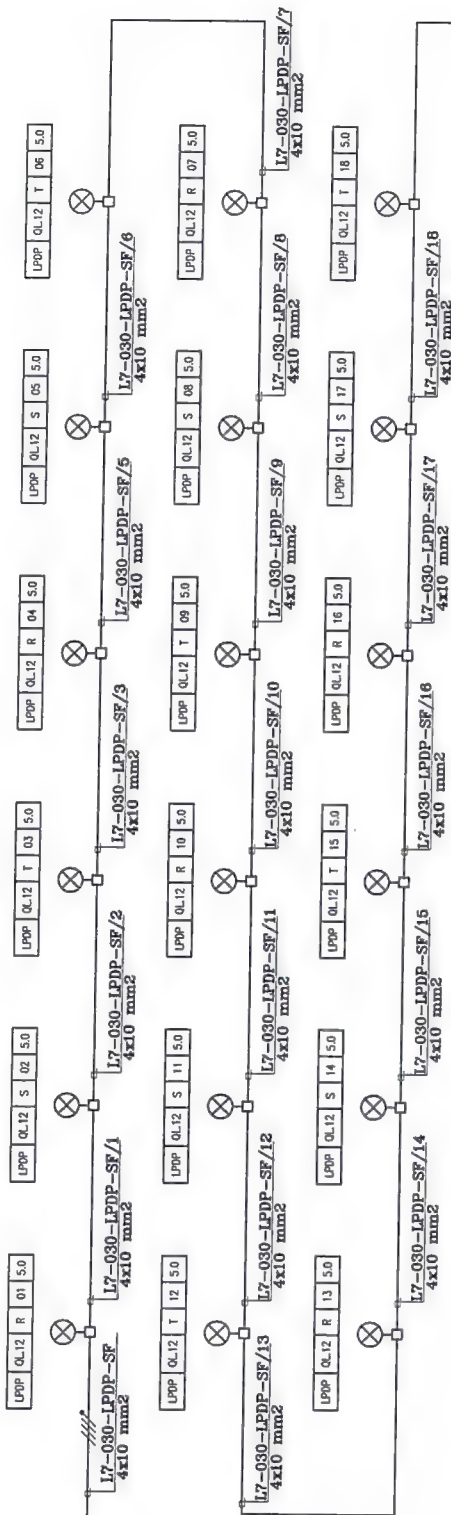
EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING & SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-LPDP-1) CKT. (QL09)

الدراسة لمهندسين الكهرباء والالكترونيات
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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

| SCALE | DOCUMENT NUMBER | REVISION |
|-------|-----------------------|----------|
| NTS | 01251-100-030-ELD-001 | 07/34 |
| | | 0 |

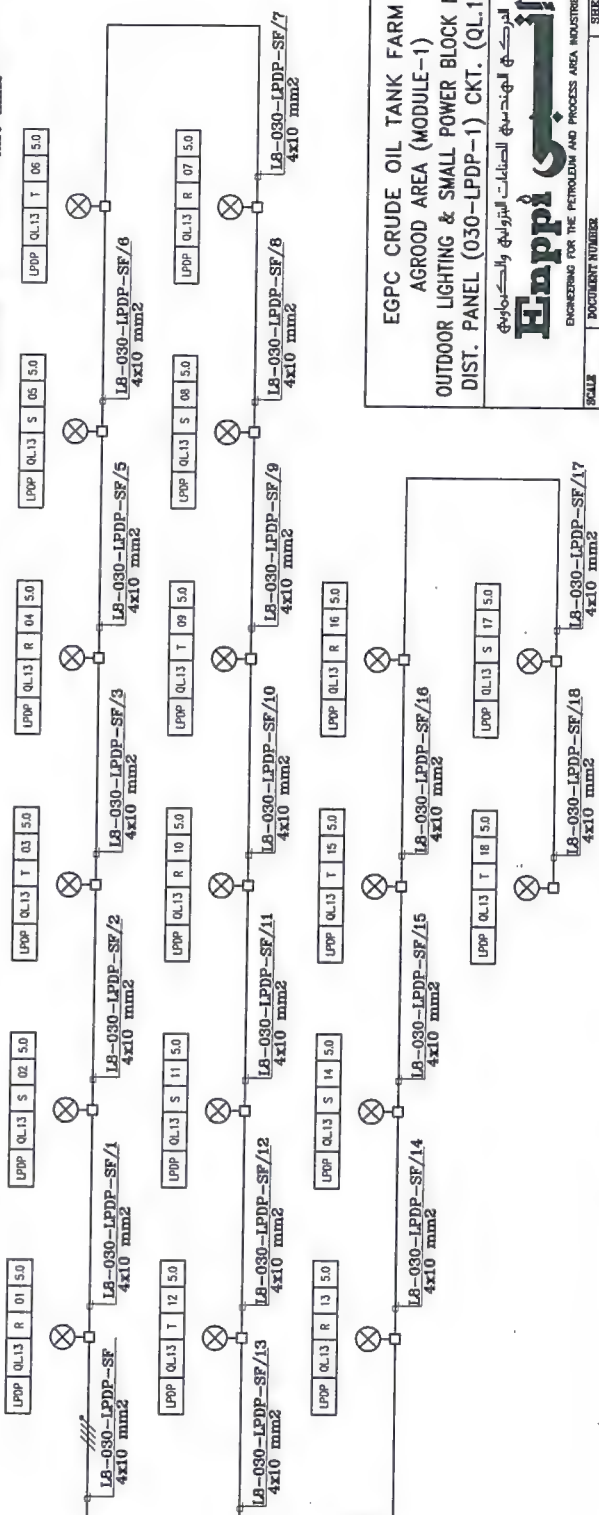
OUTDOOR LIGHTING AND
POWER DISTRIBUTION PANEL
(030-LPDP-1)

CIRCUIT NO. (QL12)
PE
TB
R12
S12
T12
N12
MCB
10A
4P



CIRCUIT NO. (QL13)

TB
R13
S13
T13
N13
MCB
10A
4P



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING & SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-LPDP-1) CKT. (QL12/13)

EGPC
ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

DOCUMENT NUMBER
01251-100-030-ELD-001
SHEET
09/34
DIVISION
0

OUTDOOR LIGHTING AND
POWER DISTRIBUTION PANEL
(030-LPDP-1)

CIRCUIT NO. (QL14)

MCB
10A
4P

PE

TB
R14
S14
T14
N14

U14P QL14 R 01 5.0

U14P QL14 S 02 5.0

U14P QL14 T 03 5.0

U14P QL14 R 04 5.0

U14P QL14 S 05 5.0

U14P QL14 T 06 5.0

U14P QL14 R 07 5.0

U14P QL14 S 08 5.0

U14P QL14 T 09 5.0

U14P QL14 R 10 5.0

U14P QL14 S 11 5.0

U14P QL14 T 12 5.0

U14P QL14 R 13 5.0

U14P QL14 S 14 5.0

U14P QL14 T 15 5.0

U14P QL14 R 16 5.0

U14P QL14 S 17 5.0

U14P QL14 T 18 5.0

U14P QL14 R 19 5.0

U14P QL14 S 20 5.0

U14P QL14 T 21 5.0

U14P QL14 R 22 5.0

U14P QL14 S 23 5.0

U14P QL14 T 24 5.0

U14P QL14 R 25 5.0

U14P QL14 S 26 5.0

U14P QL14 T 27 5.0

U14P QL14 R 28 5.0

U14P QL14 S 29 5.0

U14P QL14 T 30 5.0

U14P QL14 R 31 5.0

U14P QL14 S 32 5.0

U14P QL14 T 33 5.0

U14P QL14 R 34 5.0

U14P QL14 S 35 5.0

U14P QL14 T 36 5.0

U14P QL14 R 37 5.0

U14P QL14 S 38 5.0

U14P QL14 T 39 5.0

U14P QL14 R 40 5.0

U14P QL14 S 41 5.0

U14P QL14 T 42 5.0

U14P QL14 R 43 5.0

U14P QL14 S 44 5.0

U14P QL14 T 45 5.0

U14P QL14 R 46 5.0

U14P QL14 S 47 5.0

U14P QL14 T 48 5.0

U14P QL14 R 49 5.0

U14P QL14 S 50 5.0

U14P QL14 T 51 5.0

U14P QL14 R 52 5.0

U14P QL14 S 53 5.0

U14P QL14 T 54 5.0

U14P QL14 R 55 5.0

U14P QL14 S 56 5.0

U14P QL14 T 57 5.0

U14P QL14 R 58 5.0

U14P QL14 S 59 5.0

U14P QL14 T 60 5.0

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U14P QL14 S 62 5.0

U14P QL14 T 63 5.0

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U14P QL14 S 65 5.0

U14P QL14 T 66 5.0

U14P QL14 R 67 5.0

U14P QL14 S 68 5.0

U14P QL14 T 69 5.0

U14P QL14 R 70 5.0

U14P QL14 S 71 5.0

U14P QL14 T 72 5.0

U14P QL14 R 73 5.0

U14P QL14 S 74 5.0

U14P QL14 T 75 5.0

U14P QL14 R 76 5.0

U14P QL14 S 77 5.0

U14P QL14 T 78 5.0

U14P QL14 R 79 5.0

U14P QL14 S 80 5.0

U14P QL14 T 81 5.0

U14P QL14 R 82 5.0

U14P QL14 S 83 5.0

U14P QL14 T 84 5.0

U14P QL14 R 85 5.0

U14P QL14 S 86 5.0

U14P QL14 T 87 5.0

U14P QL14 R 88 5.0

U14P QL14 S 89 5.0

U14P QL14 T 90 5.0

U14P QL14 R 91 5.0

U14P QL14 S 92 5.0

U14P QL14 T 93 5.0

U14P QL14 R 94 5.0

U14P QL14 S 95 5.0

U14P QL14 T 96 5.0

U14P QL14 R 97 5.0

U14P QL14 S 98 5.0

U14P QL14 T 99 5.0

U14P QL14 R 100 5.0

U14P QL14 S 101 5.0

U14P QL14 T 102 5.0

U14P QL14 R 103 5.0

U14P QL14 S 104 5.0

U14P QL14 T 105 5.0

U14P QL14 R 106 5.0

U14P QL14 S 107 5.0

U14P QL14 T 108 5.0

U14P QL14 R 109 5.0

U14P QL14 S 110 5.0

U14P QL14 T 111 5.0

U14P QL14 R 112 5.0

U14P QL14 S 113 5.0

U14P QL14 T 114 5.0

U14P QL14 R 115 5.0

U14P QL14 S 116 5.0

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U14P QL14 R 118 5.0

U14P QL14 S 119 5.0

U14P QL14 T 120 5.0

U14P QL14 R 121 5.0

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U14P QL14 R 124 5.0

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U14P QL14 R 127 5.0

U14P QL14 S 128 5.0

U14P QL14 T 129 5.0

U14P QL14 R 130 5.0

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U14P QL14 T 132 5.0

U14P QL14 R 133 5.0

U14P QL14 S 134 5.0

U14P QL14 T 135 5.0

U14P QL14 R 136 5.0

U14P QL14 S 137 5.0

U14P QL14 T 138 5.0

U14P QL14 R 139 5.0

U14P QL14 S 140 5.0

U14P QL14 T 141 5.0

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U14P QL14 R 148 5.0

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U14P QL14 S 155 5.0

U14P QL14 T 156 5.0

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U14P QL14 T 162 5.0

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U14P QL14 T 165 5.0

U14P QL14 R 166 5.0

U14P QL14 S 167 5.0

U14P QL14 T 168 5.0

U14P QL14 R 169 5.0

U14P QL14 S 170 5.0

U14P QL14 T 171 5.0

U14P QL14 R 172 5.0

U14P QL14 S 173 5.0

U14P QL14 T 174 5.0

U14P QL14 R 175 5.0

U14P QL14 S 176 5.0

U14P QL14 T 177 5.0

U14P QL14 R 178 5.0

U14P QL14 S 179 5.0

U14P QL14 T 180 5.0

U14P QL14 R 181 5.0

U14P QL14 S 182 5.0

U14P QL14 T 183 5.0

U14P QL14 R 184 5.0

U14P QL14 S 185 5.0

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U14P QL14 R 187 5.0

U14P QL14 S 188 5.0

U14P QL14 T 189 5.0

U14P QL14 R 190 5.0

U14P QL14 S 191 5.0

U14P QL14 T 192 5.0

U14P QL14 R 193 5.0

U14P QL14 S 194 5.0

U14P QL14 T 195 5.0

U14P QL14 R 196 5.0

U14P QL14 S 197 5.0

U14P QL14 T 198 5.0

U14P QL14 R 199 5.0

U14P QL14 S 200 5.0

U14P QL14 T 201 5.0

U14P QL14 R 202 5.0

U14P QL14 S 203 5.0

U14P QL14 T 204 5.0

U14P QL14 R 205 5.0

U14P QL14 S 206 5.0

U14P QL14 T 207 5.0

U14P QL14 R 208 5.0

U14P QL14 S 209 5.0

U14P QL14 T 210 5.0

U14P QL14 R 211 5.0

U14P QL14 S 212 5.0

U14P QL14 T 213 5.0

U14P QL14 R 214 5.0

U14P QL14 S 215 5.0

U14P QL14 T 216 5.0

U14P QL14 R 217 5.0

U14P QL14 S 218 5.0

U14P QL14 T 219 5.0

U14P QL14 R 220 5.0

U14P QL14 S 221 5.0

U14P QL14 T 222 5.0

U14P QL14 R 223 5.0

U14P QL14 S 224 5.0

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U14P QL14 S 227 5.0

U14P QL14 T 228 5.0

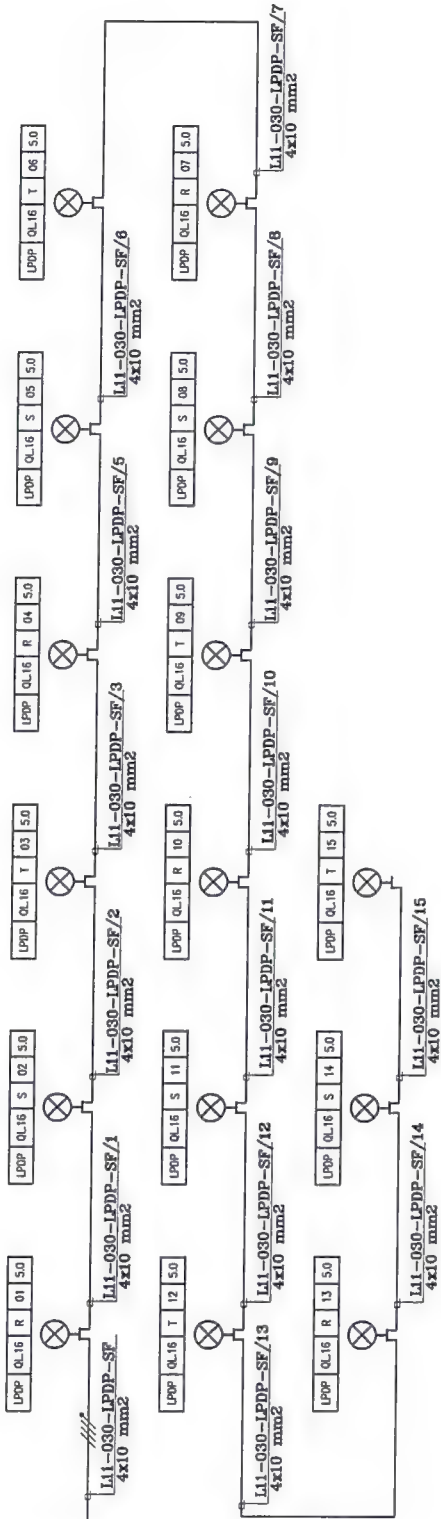
U14P QL14 R 229 5.0

U14P QL14 S 230 5.0

U14P QL14 T 231

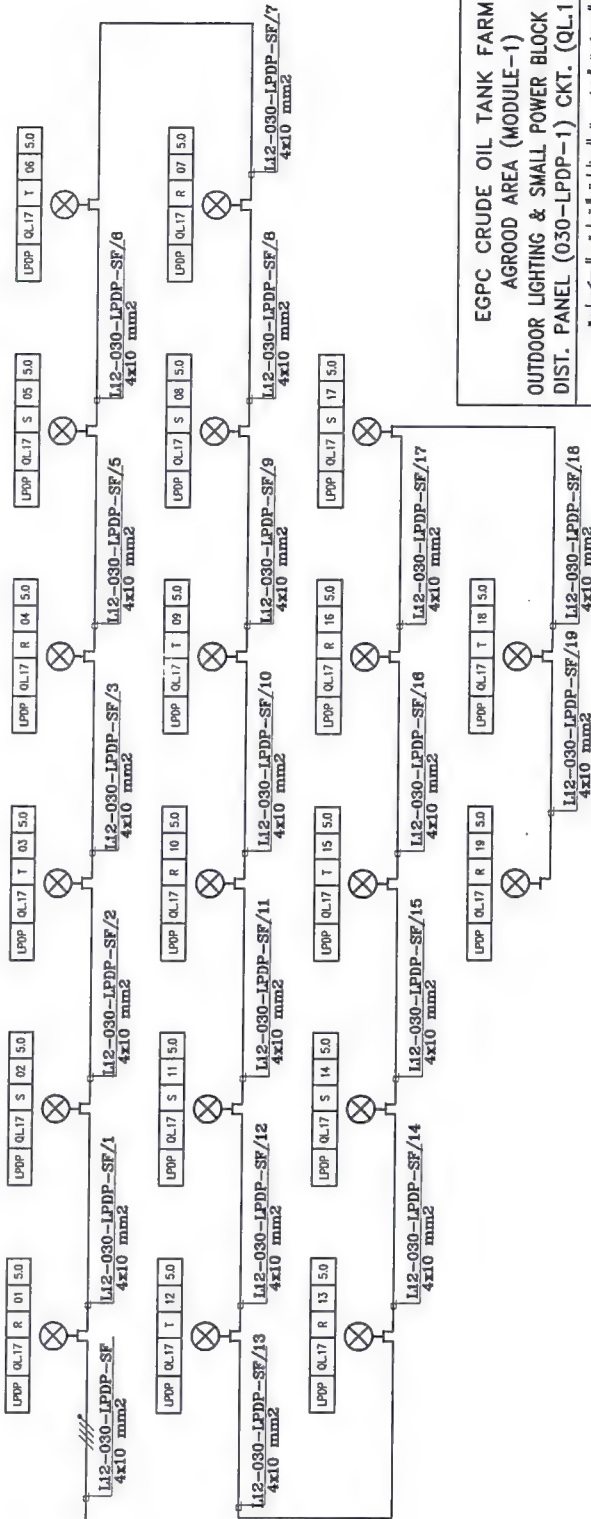
OUTDOOR LIGHTING AND
POWER DISTRIBUTION PANEL
(030-LPDP-1)

CIRCUIT NO.(QL16)
PE
MCB
10A
4P
TB
R16
S16
T16
N16



CIRCUIT NO.(QL17)

TB
R17
S17
T17
N17
MCB
10A
4P

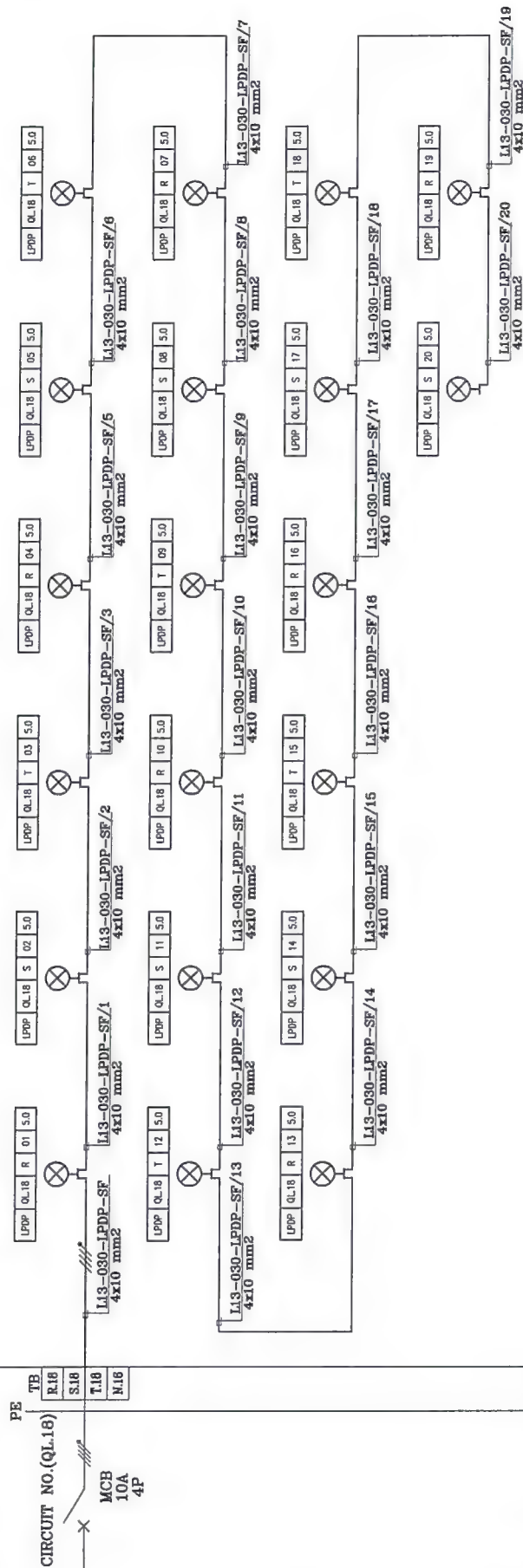


EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING & SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-LPDP-1) CKT. (QL16/17)

الدائرة الكهربائية للصناديق الخارجية والكتلة الصغيرة
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NTS
DOCUMENT NUMBER
01251-100-030-ELD-001
REVISION
11/34
0

OUTDOOR LIGHTING AND
POWER DISTRIBUTION PANEL
(030-LPDP-1)



SPARE

SPARE

EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING & SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-LPDP-1) CKT. (QL18/19/20)

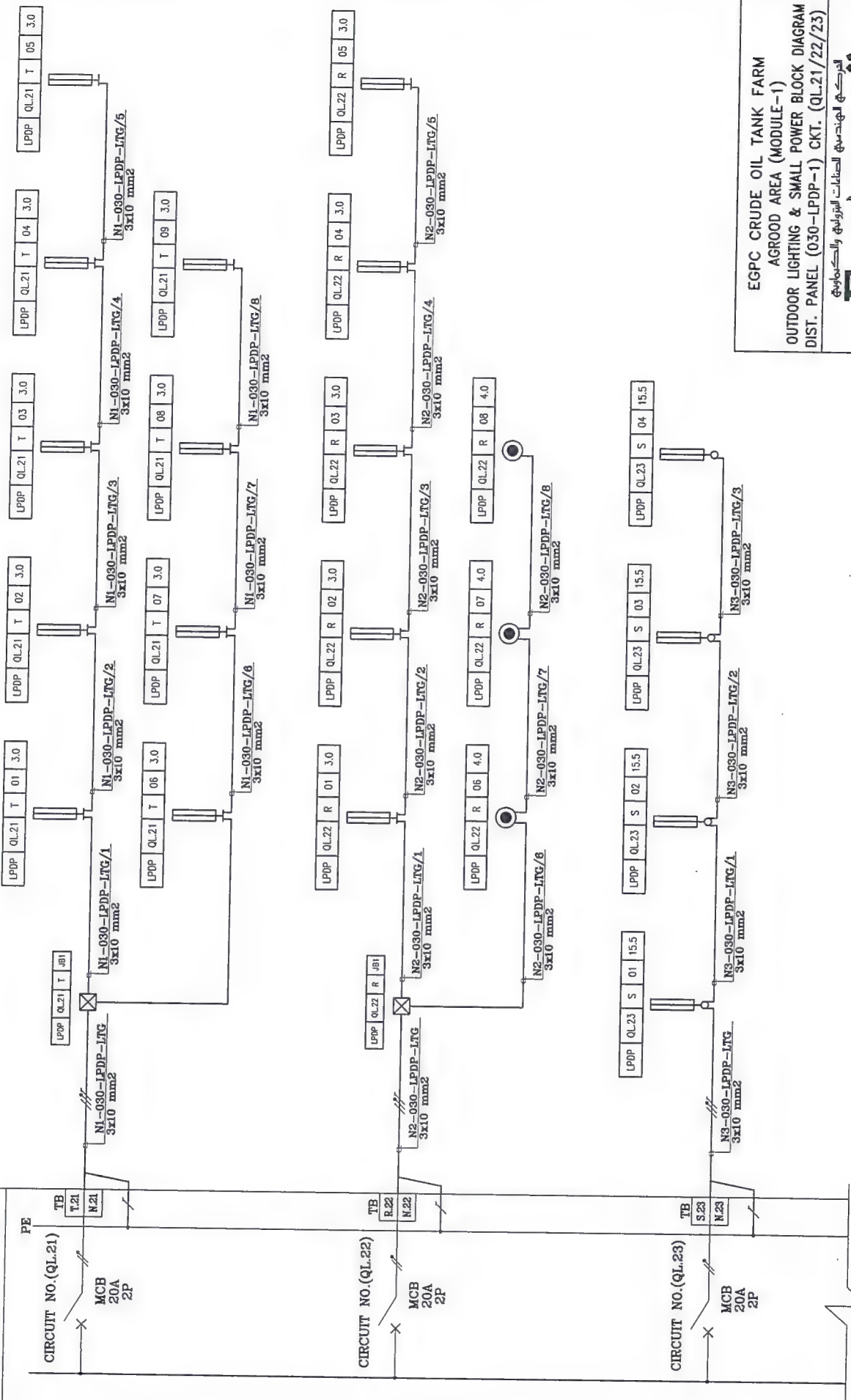
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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

SCALE: 01251-100-030-ELD-001 12/34 0

OUTDOOR LIGHTING AND
POWER DISTRIBUTION PANEL
(030-LPDP-1)



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING & SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-LPDP-1) CKT. (QL.21/22/23)

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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES
DOCUMENT NUMBER
01251-100-030-ELD-001
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NTS
SUBJECT
REVISION
13/34
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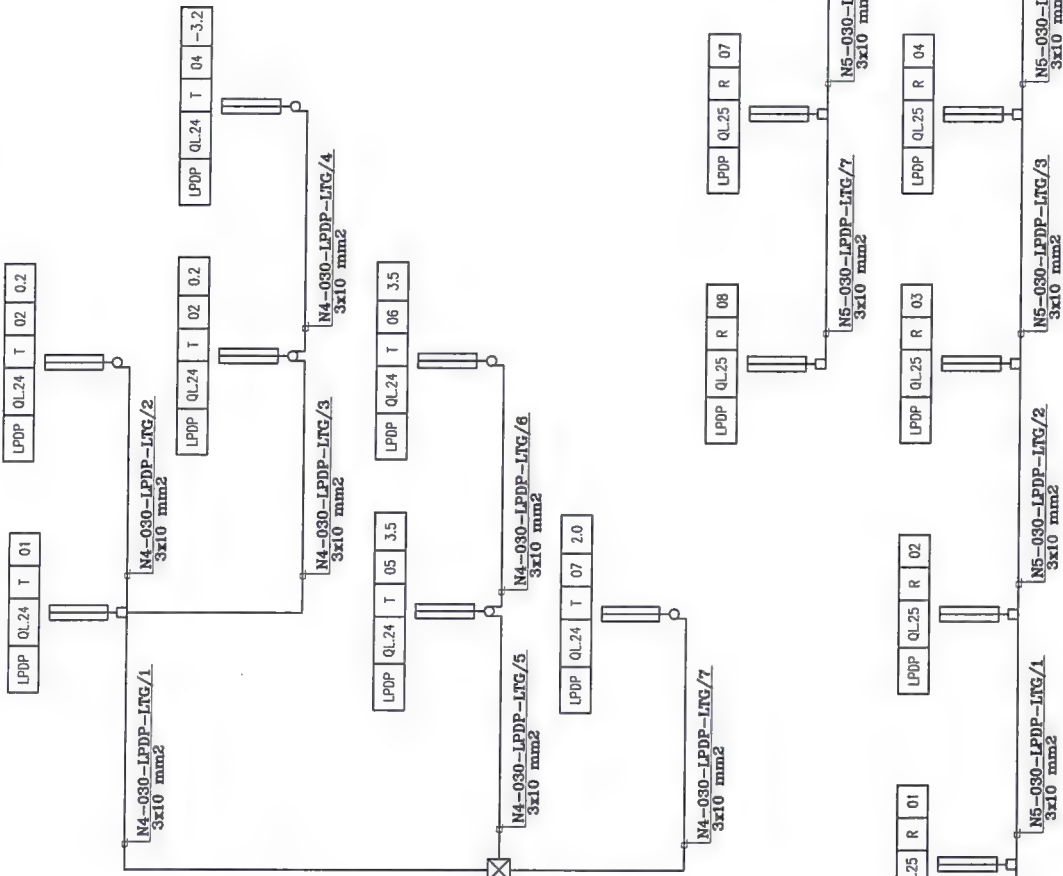
OUTDOOR LIGHTING AND
POWER DISTRIBUTION PANEL
(030-LPDP-1)

PE

CIRCUIT NO. (QL.24)

MCB
20A
2P

TB
T.24
N.24

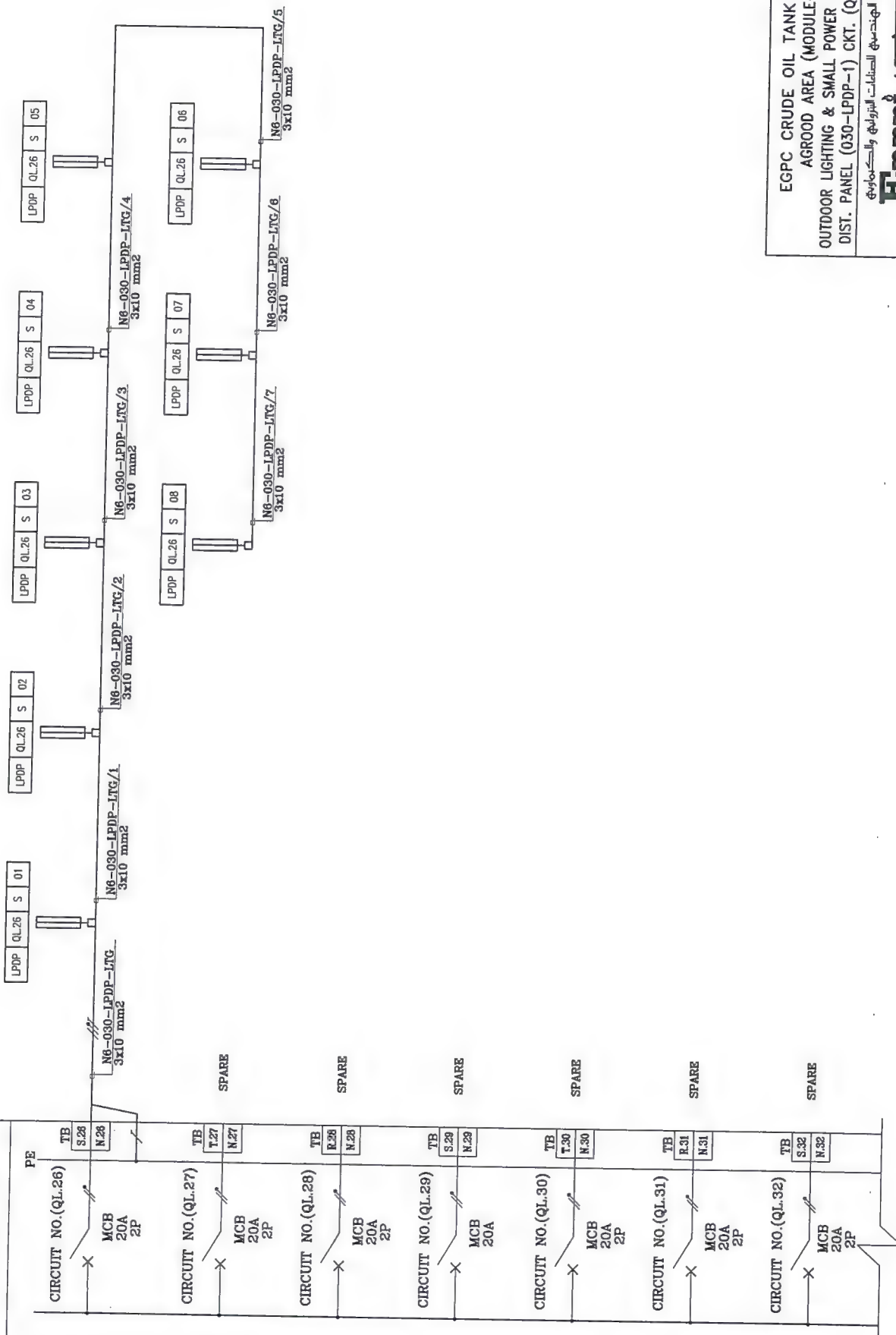


EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING & SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-LPDP-1) CKT. (QL.24/25)

الدائرة الكهربائية للأنوار والصوتيات
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OUTDOOR LIGHTING AND
POWER DISTRIBUTION PANEL
(030-LPDP-1)

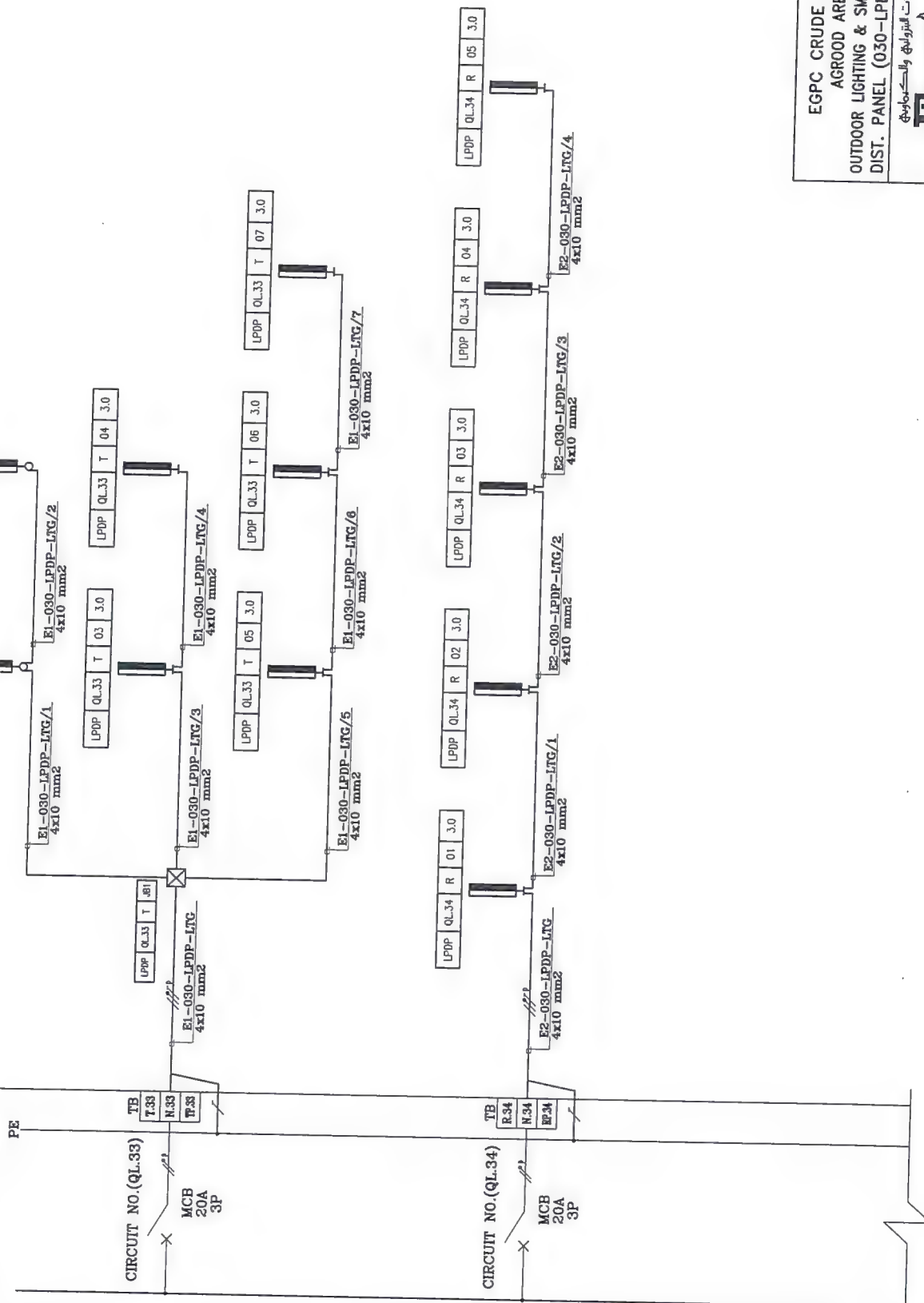


EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING & SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-LPDP-1) CKT. (QL.26 TO QL.32)

المركز الهندسي للصناعات البترولية والكيماويات
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OUTDOOR LIGHTING AND
POWER DISTRIBUTION PANEL
(030-LPDP-1)

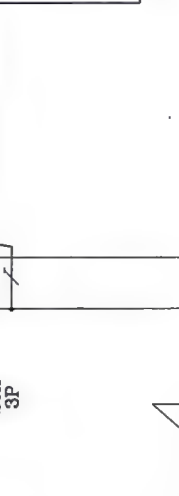
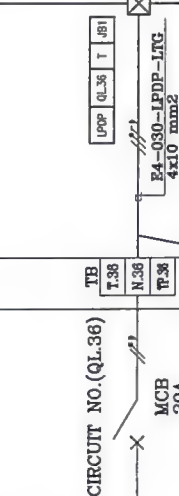
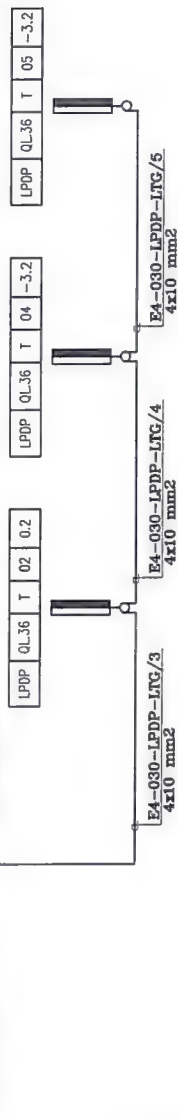
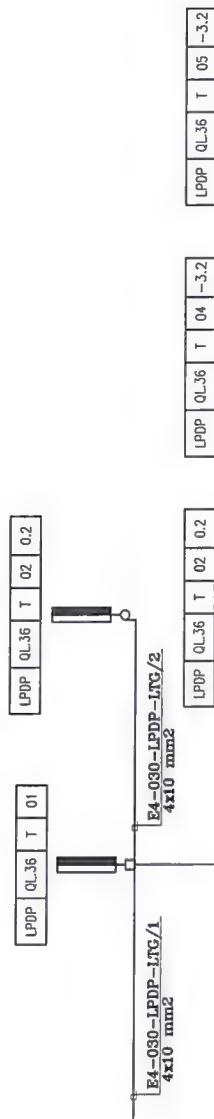


EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING & SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-LPDP-1) CKT. (QL33/34)

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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

| | | | |
|-------|-----------------------|-------|----------|
| SCALE | DOCUMENT NUMBER | SHEET | REVISION |
| NTS | 01251-100-030-ELD-001 | 16/34 | 0 |

PE
CIRCUIT NO.(QL35)
TB
S35
N35
S35
MCB
20A
3P



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING & SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-LPDP-1) CKT. (QL.35/36)

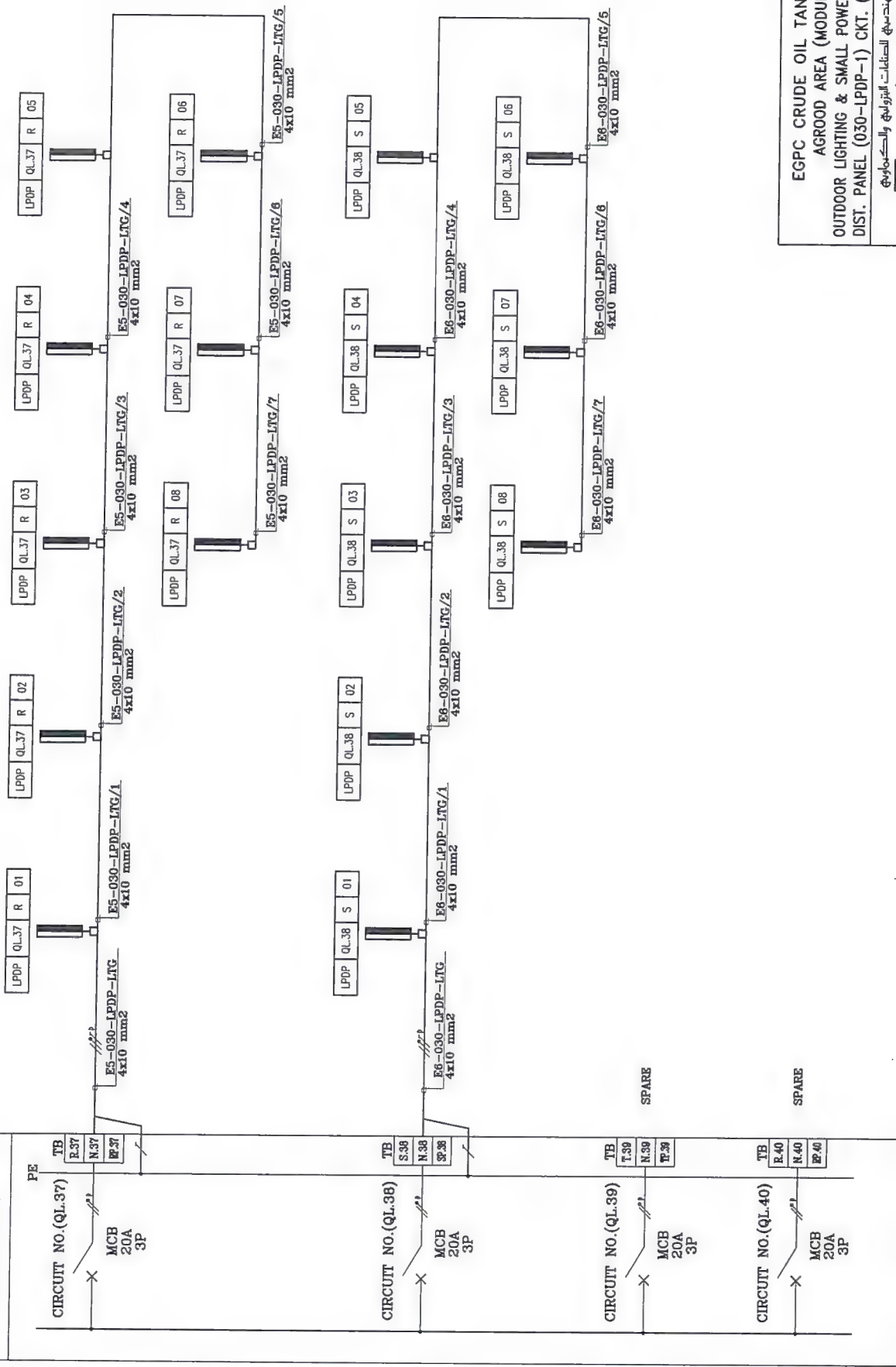
الدرك لهندسة الصناعات النسيجية والكهروميكانيكية

ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

NTS

| DOCUMENT NUMBER | SHEET | REVISION |
|-----------------------|-------|----------|
| 01251-100-030-ELD-001 | 17/34 | 0 |

OUTDOOR LIGHTING AND
POWER DISTRIBUTION PANEL
(030-LPDP-1)

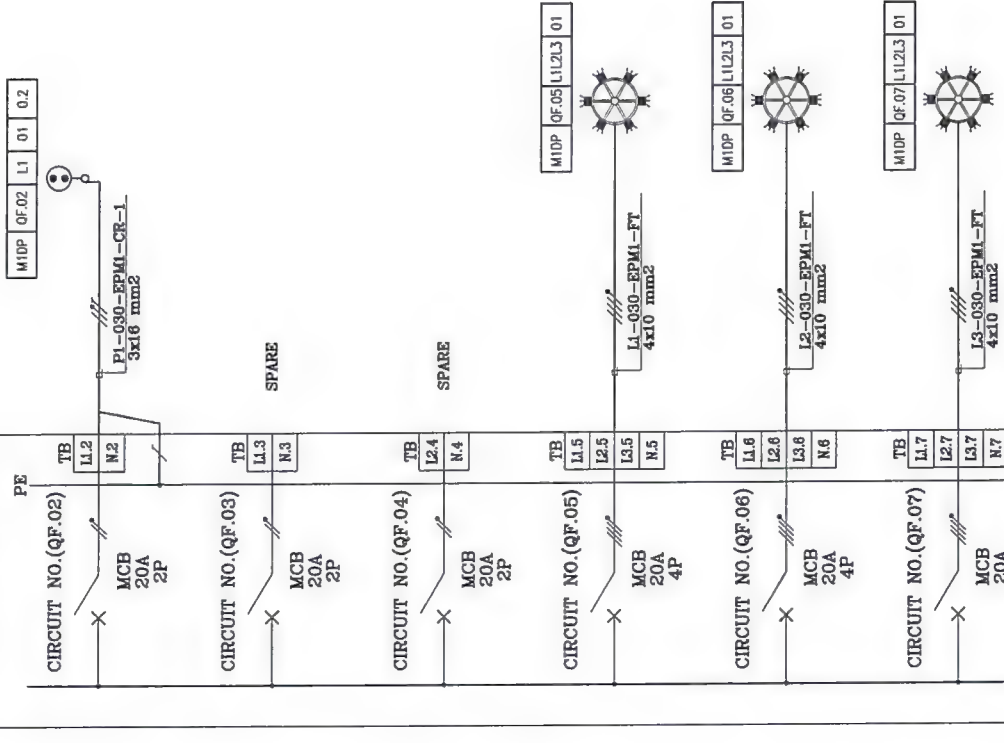


EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING & SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-LPDP-1) CKT. (QL.37/38/39/40)

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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

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|--------|-----------------------|----------|
| SCALE | DOCUMENT NUMBER | REVISION |
| N.T.S. | 01251-100-030-ELD-001 | 18/34 0 |

MODULE OUTDOOR LIGHTING
AND POWER DISTRIBUTION
PANEL (030-EPM1-DP-2)



EGPC CRUDE OIL TANK FARM

AGROOD AREA (MODULE-1)

OUTDOOR LIGHTING AND SMALL POWER BLOCK DIAGRAM

DIST. PANEL (030-EPM1-DP-2) CKT. (QF.02 TO QF.07)

المركز الهندسي للصناعات البترولية والكيمياء

Enppi

ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

SCALE

NTS

DOCUMENT NUMBER

01251-100-030-ELD-001

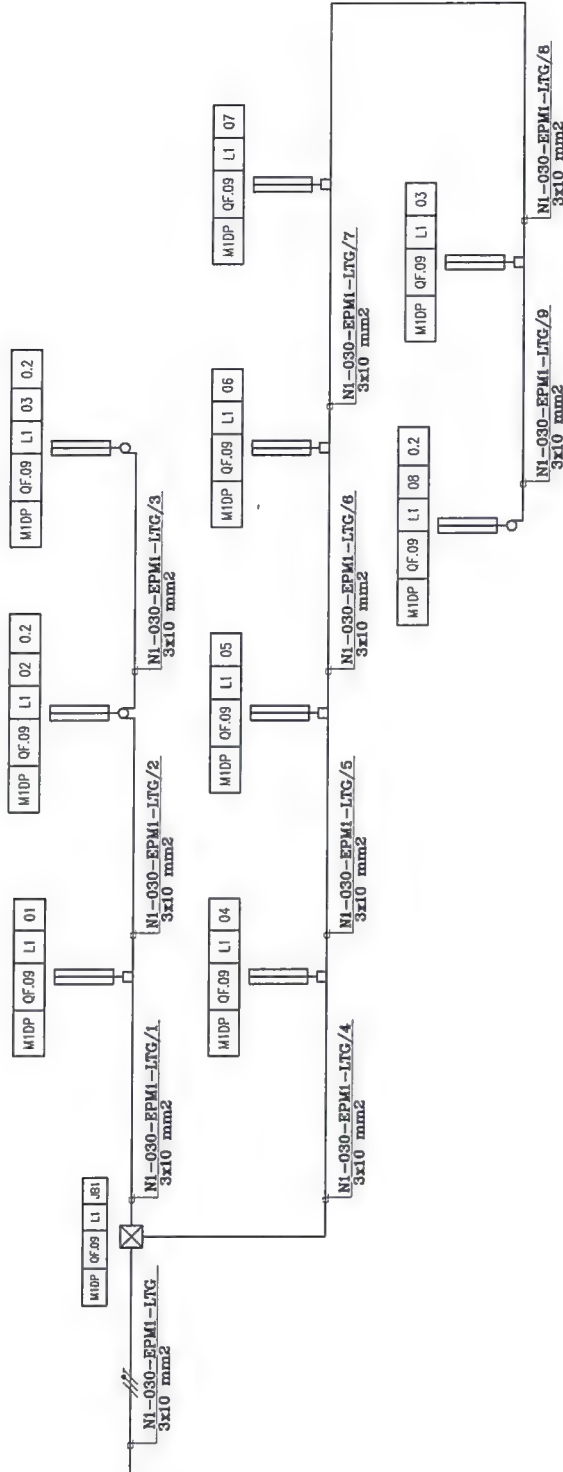
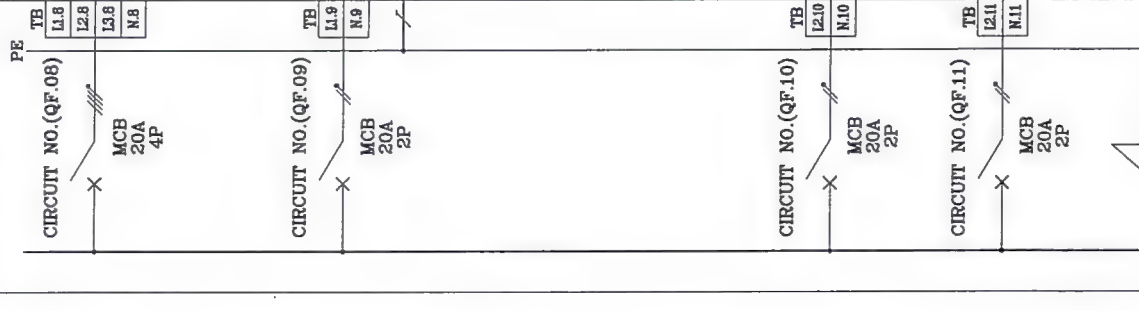
SHEET

19/34

REVISION

0

MODULE OUTDOOR LIGHTING
AND POWER DISTRIBUTION
PANEL (030-EPMI-DP-2)



EGPC CRUDE OIL TANK FARM

AGROOD AREA (MODULE-1)

OUTDOOR LIGHTING AND SMALL POWER BLOCK DIAGRAM

DIST. PANEL (030-EMP1-DP-2) CKT. (QF.08 TO QF.11)

المرکز الهندسي للبتروكيماويات والكيماويات

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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

DOCUMENT NUMBER

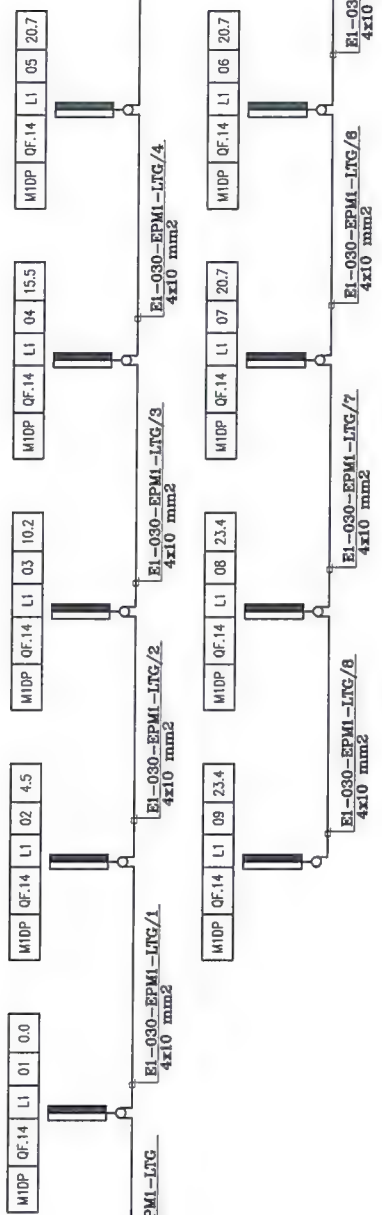
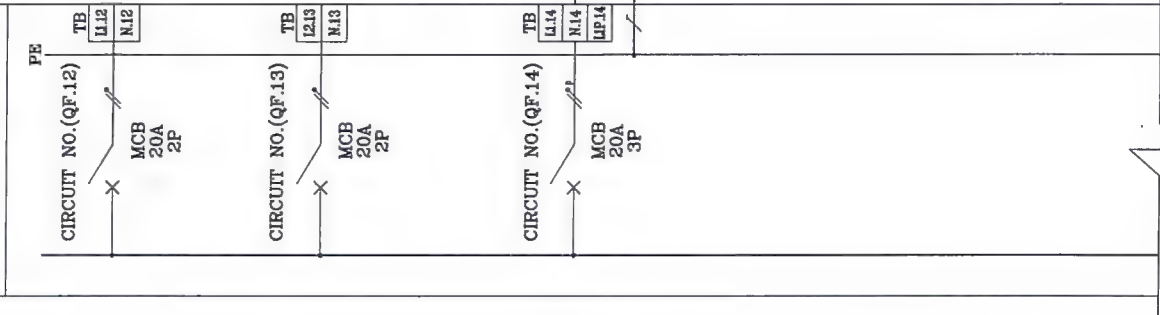
NTS

01251-100-030-ELD-001

20/34

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MODULE OUTDOOR LIGHTING
AND POWER DISTRIBUTION
PANEL (030-EPM1-DP-2)



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING AND SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-EPM1-DP-2) CKT. (QF.12/13/14)

المركز الهندسي للصناعات البترولية والكابلات

ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES
SCALE
NTS

DOCUMENT NUMBER
01251-100-030-ELD-001

SHEET
21/34

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| FE | TB | L215 | N.15 | L2P.15 | TB | L216 | N.16 | L2P.16 | TB | L117 | N.17 | L1P.17 | TB | L218 | N.18 | L2P.18 | TB | L319 | N.19 |
|--------------------|----|------|------|--------|--------------------|------|------|--------|--------------------|------|------|--------|--------------------|------|------|--------|--------------------|------|------|
| CIRCUIT NO.(QF.15) | | | | | CIRCUIT NO.(QF.16) | | | | CIRCUIT NO.(QF.17) | | | | CIRCUIT NO.(QF.18) | | | | CIRCUIT NO.(QF.19) | | |
| X | | | | | X | | | | X | | | | X | | | | X | | |
| MCB | | | | | MCB | | | | MCB | | | | MCB | | | | MCB | | |
| 20A | | | | | 20A | | | | 20A | | | | 20A | | | | 20A | | |
| 3P | | | | | 3P | | | | 3P | | | | 3P | | | | 3P | | |



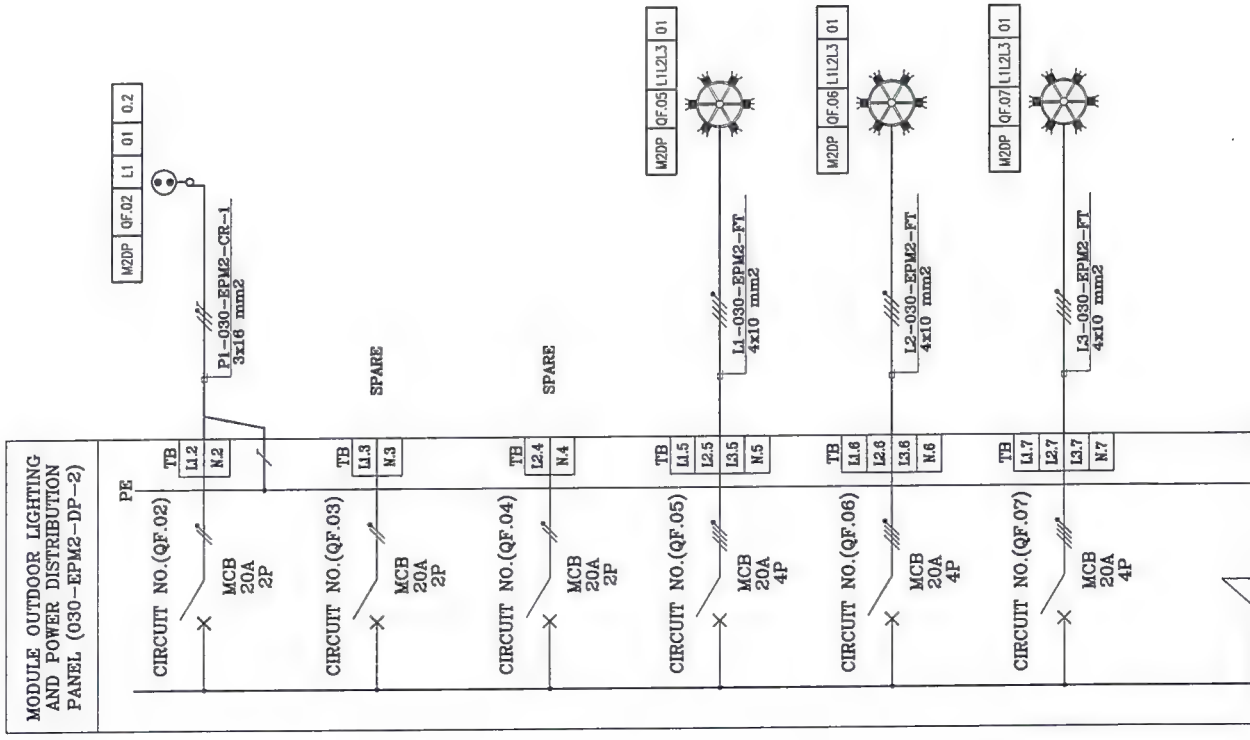
DEDICATED FOR MODULE ROOF TOP NORMAL LIGHTING

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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

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EGPC CRUDE OIL TANK FARM
 AGROOD AREA (MODULE-1)
 OUTDOOR LIGHTING AND SMALL POWER BLOCK DIAGRAM
 DIST. PANEL (030-EMP2-DP-2) CKT. (QF.02 TO QF.07)

المركز الهندسي للصناعات البترولية والكيمائيات

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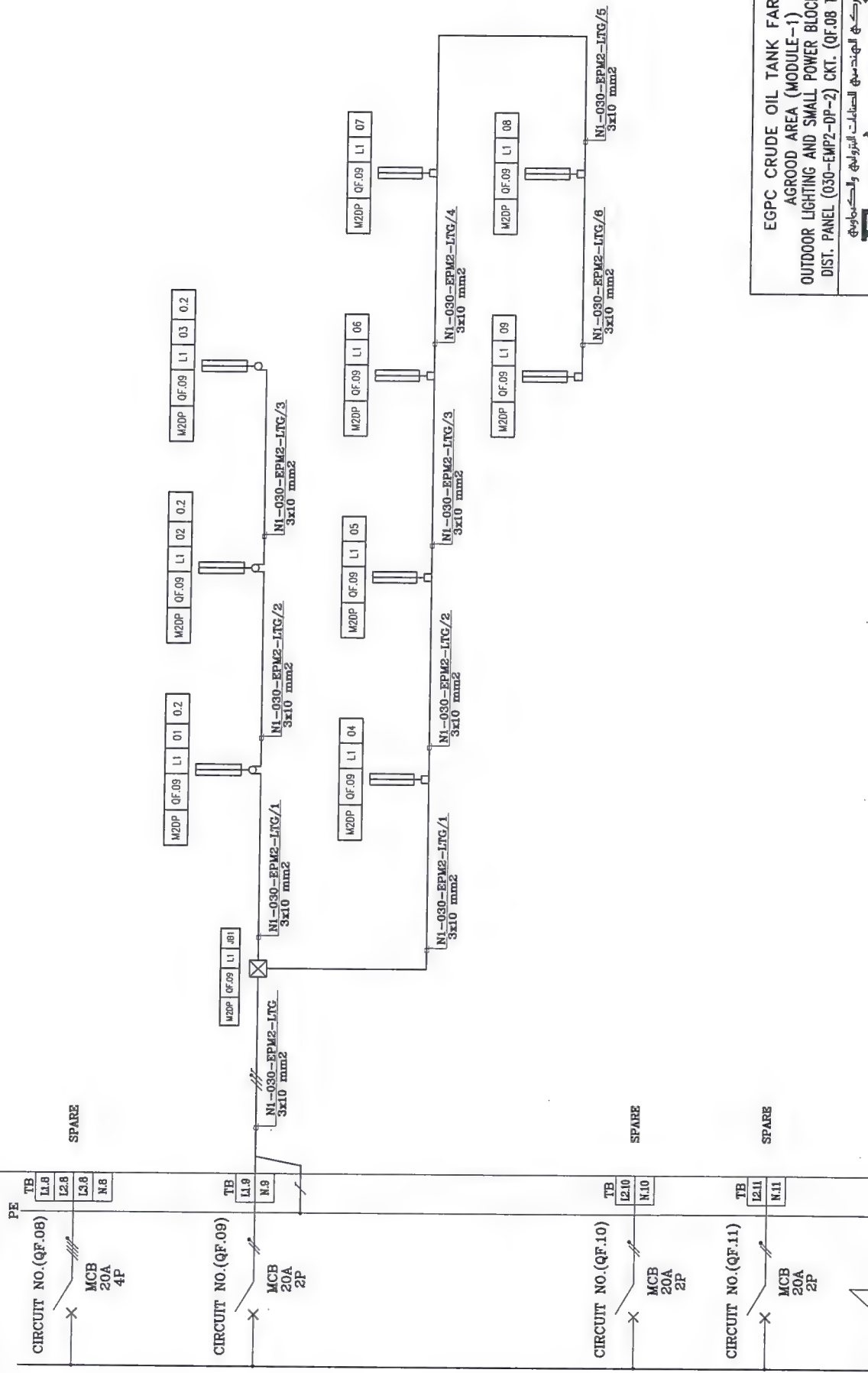
ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

DOCUMENT NUMBER: 01251-100-030-ELD-001 23/34 0

SCALE: NTS

REVISION: 0

MODULE OUTDOOR LIGHTING
AND POWER DISTRIBUTION
PANEL (030-EPM2-DP-2)

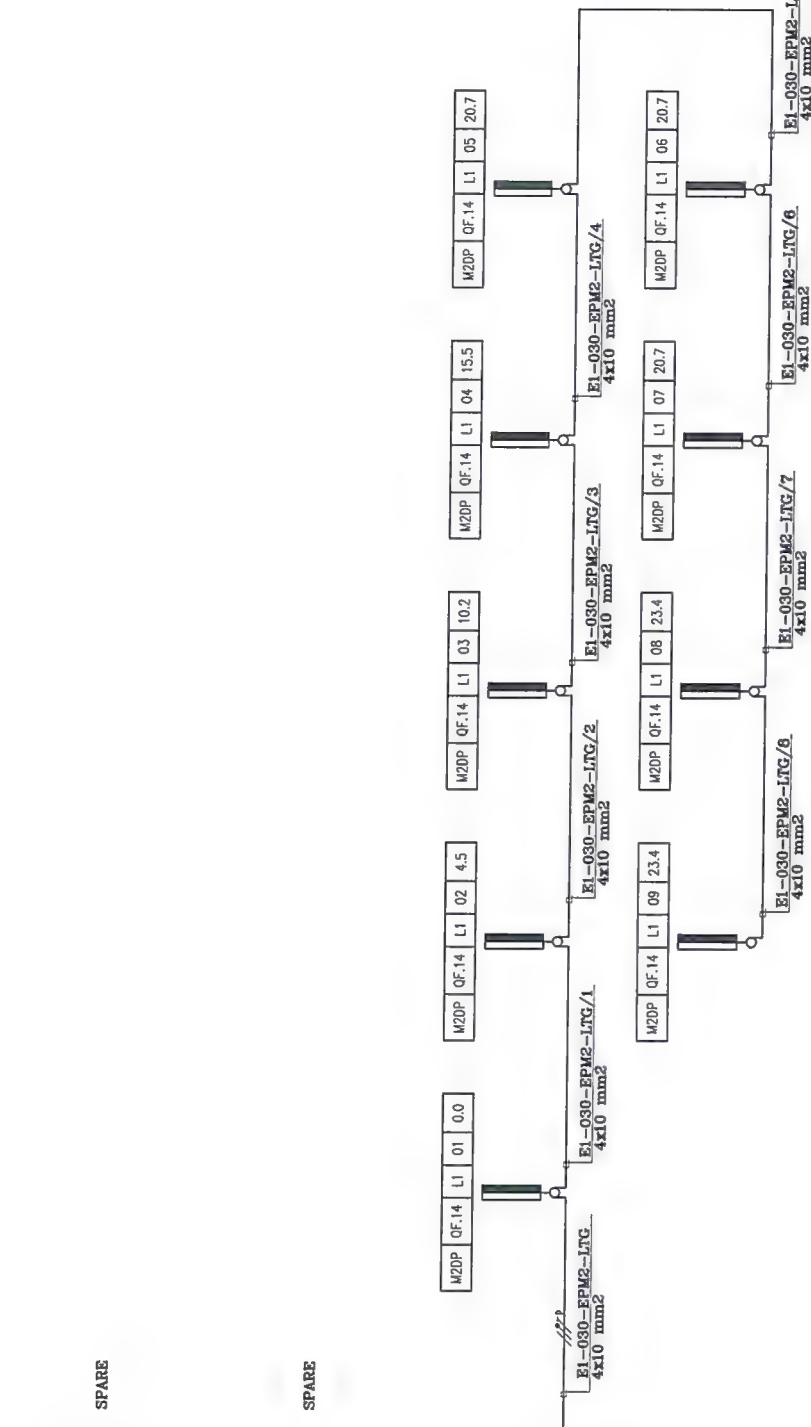
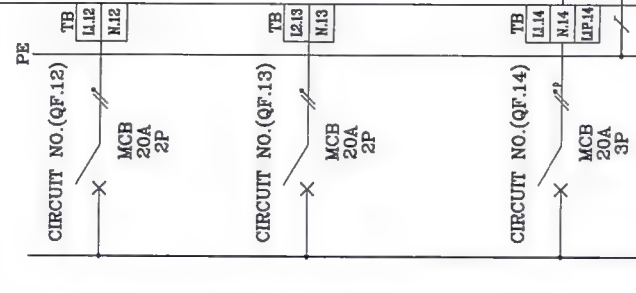


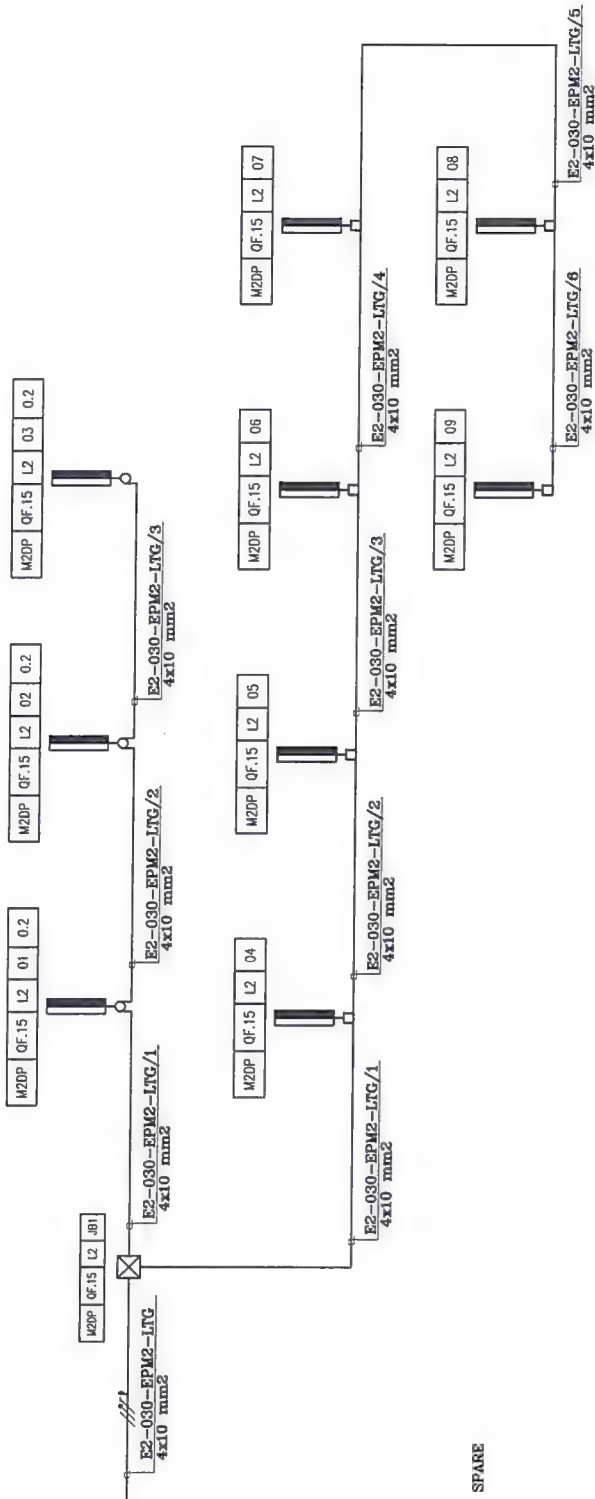
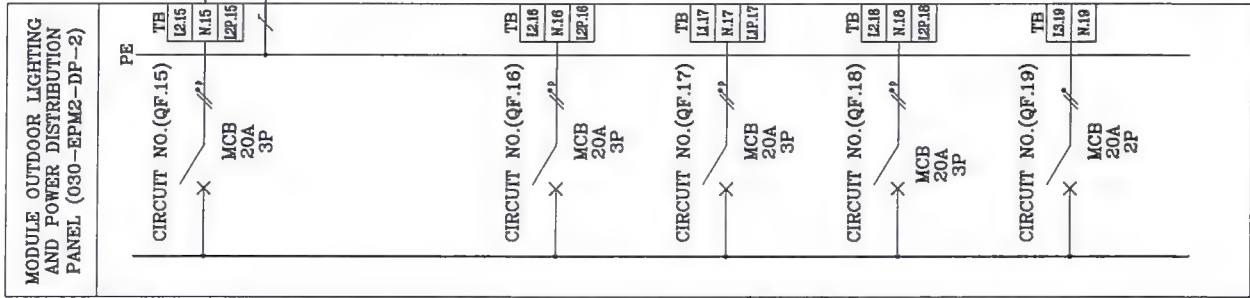
EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING AND SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-EMP2-DP-2) CKT. (QF.08 TO QF.11)

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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

SCALE NTS 01251-100-030-ELD-001 24/34 0

MODULE OUTDOOR LIGHTING
AND POWER DISTRIBUTION
PANEL (030-EPM2-DP-2)





SPARE

SPARE

DEDICATED FOR MODULE PERIMETRAL EMERGENCY LIGHTING

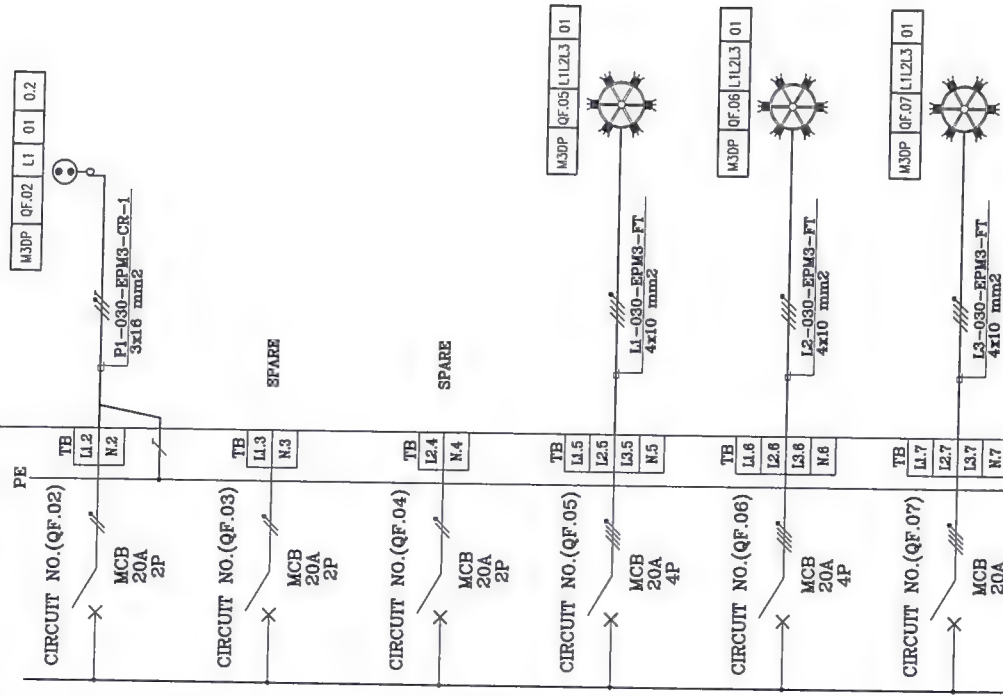
DEDICATED FOR MODULE ROOF TOP NORMAL LIGHTING

EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING AND SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-EMP2-DP-2) CKT. (QF.15 TO QF.19)

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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

| SCALE | DOCUMENT NUMBER | SHEET | EXTENSION |
|-------|-----------------------|-------|-----------|
| NTS | 01251-100-030-ELD-001 | 26/34 | 0 |

MODULE OUTDOOR LIGHTING
AND POWER DISTRIBUTION
PANEL (030-EPM3-DP-2)



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING AND SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-EMP3-DP-2) CKT. (QF.02 TO QF.07)

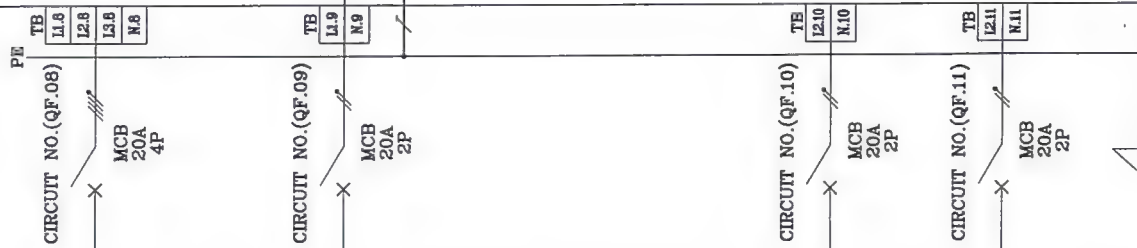
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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

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| SCALE | DOCUMENT NUMBER | SECRET | REVISION |
| NTS | 01251-100-030-ELD-001 | 27/34 | 0 |

| PE | TB |
|------|----|
| L1.B | |
| L2.B | |
| L3.B | |
| N.B | |

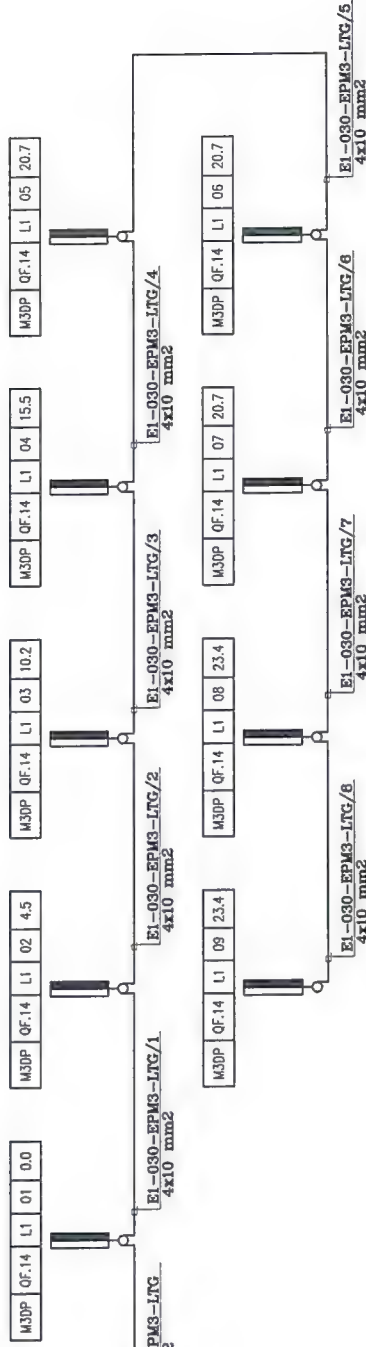
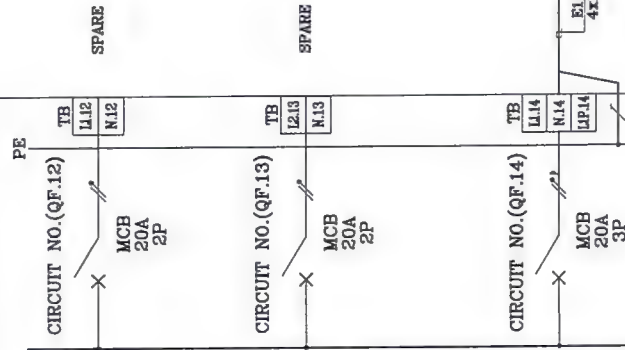
CIRCUIT NO. (Q.F.08)

MCB
20A



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| SCALE | DOCUMENT NUMBER | SHEET | SECTION |
| NTS | 01251-100-030-ELD-001 | 28/34 | 0 |

MODULE OUTDOOR LIGHTING
AND POWER DISTRIBUTION
PANEL (030-EPM3-DP-2)



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING AND SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-EMP3-DP-2) CKT. (QF.12/13/14)

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SCALE NTS

DOCUMENT NUMBER 01251-100-030-ELD-001

REVISION 29/34 0

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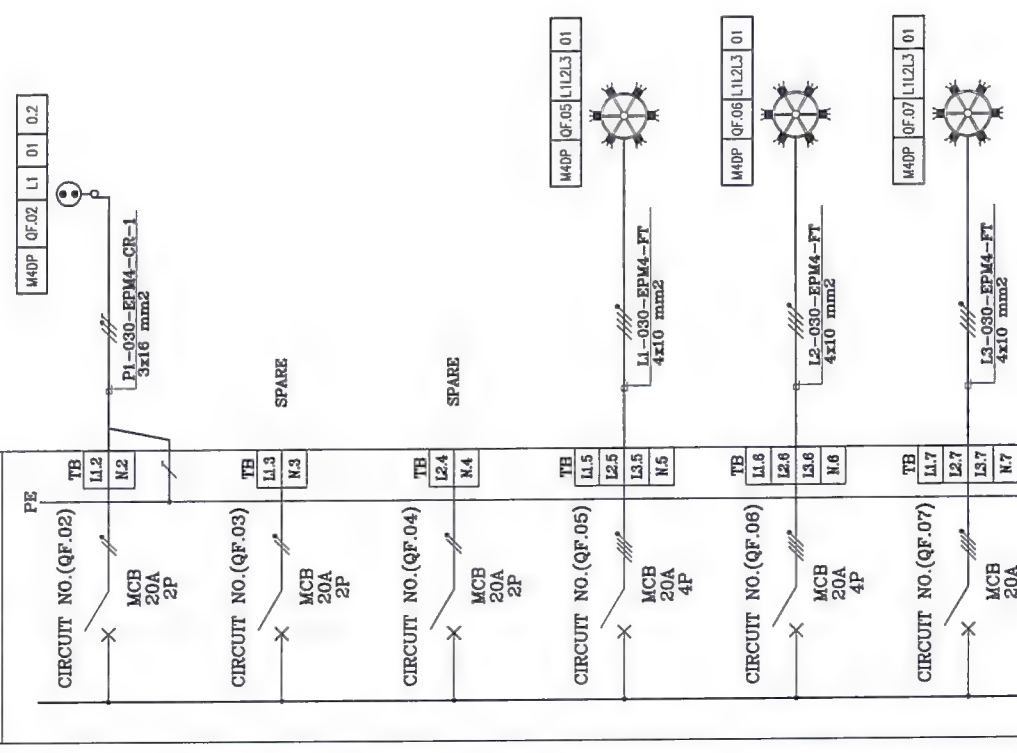
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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

DOCUMENT NUMBER
01251-100-030-ELD-001

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| SECRET | REVISION |
| 30/34 | 0 |

MODULE OUTDOOR LIGHTING
AND POWER DISTRIBUTION
PANEL (030-EPM4-DP-2)



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING AND SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-EMP4-DP-2) CKT. (QF.02 TO QF.07)
المركز الهندسي للصناعات البترولية والكهرباء

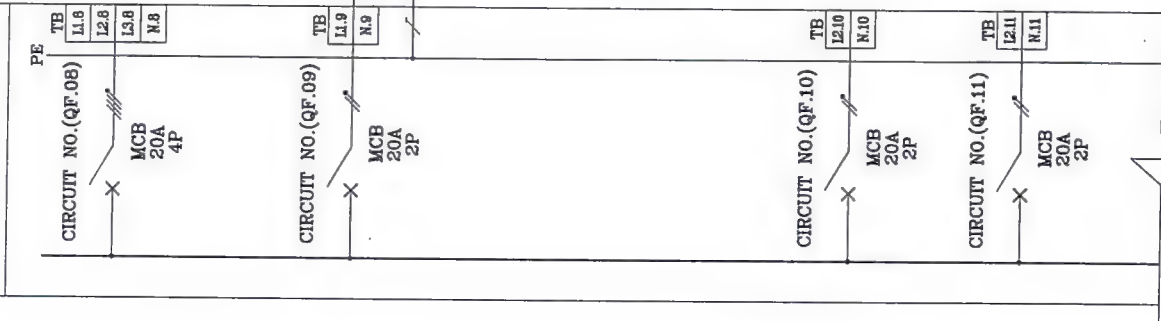
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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES
DOCUMENT NUMBER
01251-100-030-ELD-001

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MODULE OUTDOOR LIGHTING
AND POWER DISTRIBUTION
PANEL (030-EPM4-DP-2)



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE-1)
OUTDOOR LIGHTING AND SMALL POWER BLOCK DIAGRAM
DIST. PANEL (030-EMP4-DP-2) CKT. (QF.08 TO QF.11)

الدراسة الهندسية للصناعات البترولية والكيمياء

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ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

| SCALE | DOCUMENT NUMBER | SHEET | DIVISION |
|-------|-----------------------|-------|----------|
| NTS | 01251-100-030-ELD-001 | 32/34 | 0 |

PE

CIRCUIT NO.(QF.12)

MCB
20A
2P

TB

L12

N12

CIRCUIT NO.(QF.13)

MCB
20A
2P

TB

L213

N13

CIRCUIT NO.(QF.14)

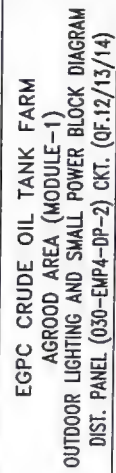
MCB
20A
3P

TB

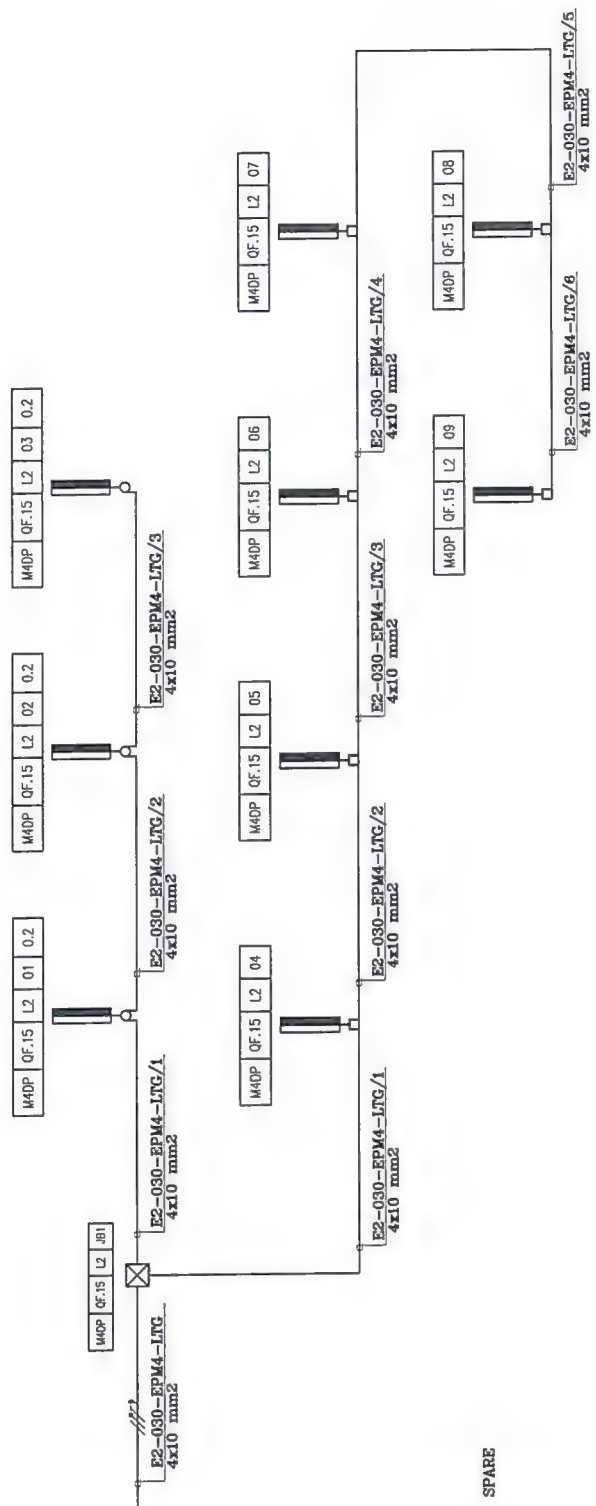
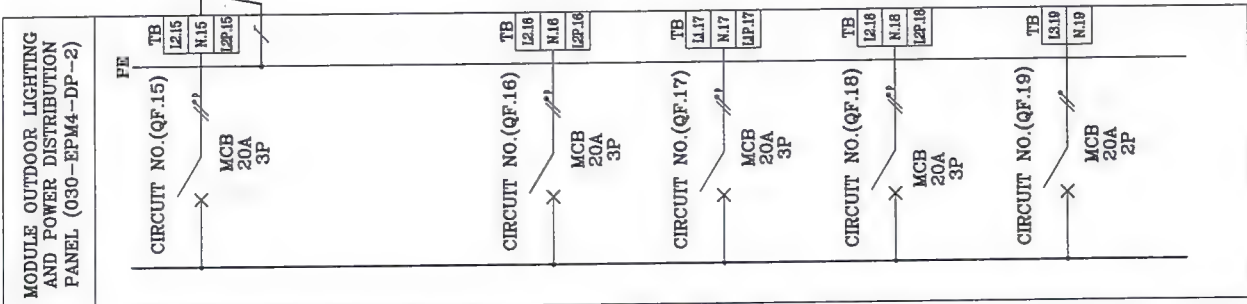
L14

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| المركز الهندسي للصناعات البترولية والكيمائيات | Enppi | | ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES | |
| | DOCUMENT NUMBER | SECURITY | ATTENTION | |
| NTS | 01251-100-030-ELD-001 | 33/34 | 0 | |



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|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

12.03- Motor Datasheets

| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

12.04- Electrical Cables Schedule

| PAGE | Cable Mark | GL1 | FROM | TO | GL2 | CABLE/Service | Service Voltage | KW | Size | Type | L |
|------|-------------------|-----|-------------------------------------|---------------------------------------|-----|------------------|-----------------|----|---------|------|------|
| 38 | P-030-LPDP-1 | WP | 030-SUB-LVSWG-1 (A2-Q8) | 030-LPDP-1 | EX | 3PH POWER FEEDER | 400VAC | 40 | 3.5x120 | 4B | 370 |
| 38 | P1-030-LPDP-CR-4B | EX | 030-LPDP-1 (QL 01) | Convenience Receptacle ckt.1 Dis-4B | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 200 |
| 38 | P1-030-LPDP-CR-1 | EX | Convenience Receptacle ckt.1 Dis-4B | Convenience Receptacle ckt.1 JB-1 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 35 |
| 38 | P1-030-LPDP-CR-2 | EX | Convenience Receptacle ckt.1 JB-1 | Convenience Receptacle ckt.1 JB-2 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 50 |
| 38 | P1-030-LPDP-CR-3 | EX | Convenience Receptacle ckt.1 Dis-4B | Convenience Receptacle ckt.1 JB-3 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 125 |
| 38 | P2-030-LPDP-CR-4B | EX | 030-LPDP-1 (QL 02) | Convenience Receptacle ckt.2 Dis-4B | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 50 |
| 38 | P2-030-LPDP-CR-1 | EX | Convenience Receptacle ckt.2 Dis-4B | Convenience Receptacle ckt.2 JB-2 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 140 |
| 38 | P2-030-LPDP-CR-2 | EX | Convenience Receptacle ckt.2 Dis-4B | Convenience Receptacle ckt.2 JB-2 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 120 |
| 38 | P3-030-LPDP-CR-1 | EX | 030-LPDP-1 (QL 03) | Convenience Receptacle ckt.3 JB-1 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 50 |
| 38 | P3-030-LPDP-CR-2 | EX | Convenience Receptacle ckt.3 JB-1 | Convenience Receptacle ckt.3 JB-2 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 50 |
| 38 | P3-030-LPDP-CR-3 | EX | Convenience Receptacle ckt.3 JB-2 | Convenience Receptacle ckt.3 JB-3 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 50 |
| 38 | P3-030-LPDP-CR-4 | EX | Convenience Receptacle ckt.3 JB-3 | Convenience Receptacle ckt.3 JB-4 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 50 |
| 39 | L1-030-LPDP-SF | EX | 030-LPDP-1 (QL 06) | Street / Fence Lighting Circuit No.1 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 1510 |
| 39 | L2-030-LPDP-SF | EX | 030-LPDP-1 (QL 07) | Street / Fence Lighting Circuit No.2 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 250 |
| 39 | L3-030-LPDP-SF | EX | 030-LPDP-1 (QL 08) | Street / Fence Lighting Circuit No.3 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 400 |
| 39 | L4-030-LPDP-SF | EX | 030-LPDP-1 (QL 09) | Street / Fence Lighting Circuit No.4 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 670 |
| 39 | L5-030-LPDP-SF | EX | 030-LPDP-1 (QL 10) | Street / Fence Lighting Circuit No.5 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 1170 |
| 39 | L6-030-LPDP-SF | EX | 030-LPDP-1 (QL 11) | Street / Fence Lighting Circuit No.6 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 1500 |
| 39 | L7-030-LPDP-SF | EX | 030-LPDP-1 (QL 12) | Street / Fence Lighting Circuit No.7 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 670 |
| 39 | L8-030-LPDP-SF | EX | 030-LPDP-1 (QL 13) | Street / Fence Lighting Circuit No.8 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 1150 |
| 39 | L9-030-LPDP-SF | EX | 030-LPDP-1 (QL 14) | Street / Fence Lighting Circuit No.9 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 690 |
| 39 | L10-030-LPDP-SF | EX | 030-LPDP-1 (QL 15) | Street / Fence Lighting Circuit No.10 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 1190 |
| 39 | L11-030-LPDP-SF | EX | 030-LPDP-1 (QL 16) | Street / Fence Lighting Circuit No.11 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 1550 |
| 39 | L12-030-LPDP-SF | EX | 030-LPDP-1 (QL 17) | Street / Fence Lighting Circuit No.12 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 690 |
| 39 | L13-030-LPDP-SF | EX | 030-LPDP-1 (QL 18) | Street / Fence Lighting Circuit No.13 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 1240 |
| 39 | M1-030-LPDP-TG | EX | 030-LPDP-1 (QL 21) | Normal Lighting Circuit No.1 | EX | 1PH POWER FEEDER | 230VAC | | 3x10 | 3E | 400 |
| 39 | M2-030-LPDP-TG | EX | 030-LPDP-1 (QL 22) | Normal Lighting Circuit No.2 | EX | 1PH POWER FEEDER | 230VAC | | 3x10 | 3E | 350 |
| 39 | M3-030-LPDP-TG | EX | 030-LPDP-1 (QL 23) | Normal Lighting Circuit No.3 | EX | 1PH POWER FEEDER | 230VAC | | 3x10 | 3E | 300 |
| 39 | M4-030-LPDP-TG | EX | 030-LPDP-1 (QL 24) | Normal Lighting Circuit No.4 | EX | 1PH POWER FEEDER | 230VAC | | 3x10 | 3E | 450 |
| 39 | M5-030-LPDP-TG | EX | 030-LPDP-1 (QL 25) | Normal Lighting Circuit No.5 | EX | 1PH POWER FEEDER | 230VAC | | 3x10 | 3E | 150 |
| 39 | M6-030-LPDP-TG | EX | 030-LPDP-1 (QL 26) | Normal Lighting Circuit No.6 | EX | 1PH POWER FEEDER | 230VAC | | 3x10 | 3E | 150 |
| 40 | E2-030-LPDP-LTG | EX | 030-LPDP-1 (QL 33) | Emergency Lighting Circuit No.1 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 400 |
| 40 | E3-030-LPDP-LTG | EX | 030-LPDP-1 (QL 34) | Emergency Lighting Circuit No.2 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 350 |
| 40 | E4-030-LPDP-LTG | EX | 030-LPDP-1 (QL 35) | Emergency Lighting Circuit No.3 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 300 |
| 40 | E5-030-LPDP-LTG | EX | 030-LPDP-1 (QL 36) | Emergency Lighting Circuit No.4 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 450 |
| 40 | E6-030-LPDP-LTG | EX | 030-LPDP-1 (QL 37) | Emergency Lighting Circuit No.5 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 150 |
| 41 | P1-030-WR-1 | EX | 030-SUB-LVSWG-1 (A2-Q7) | Emergency Lighting Circuit No.6 | EX | 3PH POWER FEEDER | 400VAC | | 3.5x70 | 4B | 140 |
| 41 | P1-030-WR-2 | EX | 030-LPDP-1 (QL 38) | Emergency Lighting Circuit No.6 | EX | 3PH POWER FEEDER | 400VAC | | 3.5x70 | 4B | 70 |
| 41 | P2-030-WR-1 | EX | 030-SUB-LVSWG-1 (B1-Q2) | Emergency Lighting Circuit No.1 | EX | 3PH POWER FEEDER | 400VAC | | 3.5x70 | 4B | 80 |
| 41 | P2-030-WR-2 | EX | 030-SUB-LVSWG-1 (B1-Q3) | Emergency Lighting Circuit No.2 | EX | 3PH POWER FEEDER | 400VAC | | 3.5x70 | 4B | 380 |
| 41 | P2-030-WR-2 | EX | 030-SUB-LVSWG-1 (B1-Q3) | Emergency Lighting Circuit No.2 | EX | 3PH POWER FEEDER | 400VAC | | 3.5x70 | 4B | 65 |

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|----|------------------|----|-----------------------|-------------------------------|----|------------------|--------|--|------|----|-----|
| 43 | P1-030-EPM1-CR-1 | EX | 030-EPM1-DP-2 (QF 2) | Convenience Receptacles dkt.1 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 370 |
| 43 | L1-030-EPM1-FT | EX | 030-EPM1-DP-2 (QF 5) | FLOOD TOWER-1 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 350 |
| 43 | L2-030-EPM1-FT | EX | 030-EPM1-DP-2 (QF 6) | FLOOD TOWER-2 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 280 |
| 43 | L3-030-EPM1-FT | EX | 030-EPM1-DP-2 (QF 7) | FLOOD TOWER-3 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 420 |
| 43 | N1-030-EPM1-LTG | EX | 030-EPM1-DP-2 (QF 9) | TANK NORMAL LTG CKT.1 | EX | 1PH POWER FEEDER | 230VAC | | 3x10 | 3E | 600 |
| 43 | E1-030-EPM1-LTG | EX | 030-EPM1-DP-2 (QF 14) | TANK EMERGENCY LTG CKT.1 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 400 |
| 43 | E2-030-EPM1-LTG | EX | 030-EPM1-DP-2 (QF 15) | TANK EMERGENCY LTG CKT.2 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 600 |
| 48 | P1-030-EPM2-CR-1 | EX | 030-EPM2-DP-2 (QF 2) | Convenience Receptacles dkt.1 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 210 |
| 48 | L1-030-EPM2-FT | EX | 030-EPM2-DP-2 (QF 5) | FLOOD TOWER-1 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 130 |
| 48 | L2-030-EPM2-FT | EX | 030-EPM2-DP-2 (QF 6) | FLOOD TOWER-2 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 300 |
| 48 | L3-030-EPM2-FT | EX | 030-EPM2-DP-2 (QF 7) | FLOOD TOWER-3 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 300 |
| 48 | N1-030-EPM2-LTG | EX | 030-EPM2-DP-2 (QF 9) | TANK NORMAL LTG CKT.1 | EX | 1PH POWER FEEDER | 230VAC | | 3x10 | 3E | 420 |
| 48 | E1-030-EPM2-LTG | EX | 030-EPM2-DP-2 (QF 14) | TANK EMERGENCY LTG CKT.1 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 300 |
| 48 | E2-030-EPM2-LTG | EX | 030-EPM2-DP-2 (QF 15) | TANK EMERGENCY LTG CKT.2 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 520 |
| 53 | P1-030-EPM3-CR-1 | EX | 030-EPM3-DP-2 (QF 2) | Convenience Receptacles dkt.1 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 370 |
| 53 | L1-030-EPM3-FT | EX | 030-EPM3-DP-2 (QF 5) | FLOOD TOWER-1 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 350 |
| 53 | L2-030-EPM3-FT | EX | 030-EPM3-DP-2 (QF 6) | FLOOD TOWER-2 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 280 |
| 53 | L3-030-EPM3-FT | EX | 030-EPM3-DP-2 (QF 7) | FLOOD TOWER-3 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 420 |
| 53 | N1-030-EPM3-LTG | EX | 030-EPM3-DP-2 (QF 9) | TANK NORMAL LTG CKT.1 | EX | 1PH POWER FEEDER | 230VAC | | 3x10 | 3E | 600 |
| 53 | E1-030-EPM3-LTG | EX | 030-EPM3-DP-2 (QF 14) | TANK EMERGENCY LTG CKT.1 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 400 |
| 53 | E2-030-EPM3-LTG | EX | 030-EPM3-DP-2 (QF 15) | TANK EMERGENCY LTG CKT.2 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 600 |
| 58 | P1-030-EPM4-CR-1 | EX | 030-EPM4-DP-2 (QF 2) | Convenience Receptacles dkt.1 | EX | 1PH POWER FEEDER | 230VAC | | 3x16 | 3E | 210 |
| 58 | L1-030-EPM4-FT | EX | 030-EPM4-DP-2 (QF 5) | FLOOD TOWER-1 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 130 |
| 58 | L2-030-EPM4-FT | EX | 030-EPM4-DP-2 (QF 6) | FLOOD TOWER-2 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 300 |
| 58 | L3-030-EPM4-FT | EX | 030-EPM4-DP-2 (QF 7) | FLOOD TOWER-3 | EX | 3PH POWER FEEDER | 400VAC | | 4x10 | 4B | 300 |
| 58 | N1-030-EPM4-LTG | EX | 030-EPM4-DP-2 (QF 9) | TANK NORMAL LTG CKT.1 | EX | 1PH POWER FEEDER | 230VAC | | 3x10 | 3E | 420 |
| 58 | E1-030-EPM4-LTG | EX | 030-EPM4-DP-2 (QF 14) | TANK EMERGENCY LTG CKT.1 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 300 |
| 58 | E2-030-EPM4-LTG | EX | 030-EPM4-DP-2 (QF 15) | TANK EMERGENCY LTG CKT.2 | EX | 1PH POWER FEEDER | 230VAC | | 4x10 | 4L | 520 |



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

12.05- Electrical Cables Laying Certificates

| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

12.06- Electrical Cables Testing Certificates

**INSPECTION AND TEST REPORT FOR
CABLE INSULATION RESISTANCE TEST**

INSPECTION REPORT NUMBER
PTJLE-RP1

INSTRUMENT TYPE:
HIGH VOLTAGE INSULATION TESTER-SANWA-MG5000

SERIAL: 17015900385

INSPECTION DATE & TIME

28/06/2021

DOCUMENT NO.
ITR-EL-0006A

SERVICE VOLTAGE: 400

DISCIPLINE
ELECTRICAL

SYSTEM NO.:

SHEET NO

TEST VOLTAGE: 1000

AREA / PACKAGE:
SUBSTATION

| NO | Item/Tag NO. | CABLE SIZE | Continuity Test | PHASE TO PHASE | | | PHASE TO NEUTRAL "M.Ohm" | | | PHASES & NEUTRAL TO ARMOR "M.Ohm" | | | RESULT | |
|----|---------------|------------|-----------------|----------------|-------|-------|--------------------------|------|------|-----------------------------------|--------|--------|--------|-------------|
| | | | | BR-BK | BR-GR | BK-GR | BR-B | BK-B | GR-B | BR-ARM | BK-ARM | GR-ARM | B-ARM | Pass / FAIL |
| 37 | P-030-MOV-005 | 4x4 | ✓ | | | | | | | | | | | ✓ |
| 38 | P-030-MOV-007 | 4x4 | ✓ | | | | | | | | | | | ✓ |
| 39 | P-030-MOV-008 | 4x4 | ✓ | | | | | | | | | | | ✓ |
| 40 | P-030-LPD-1 | 4x4 | ✓ | | | | | | | | | | | ✓ |
| 41 | P1-030-WR-1B | 3.5x120 | ✓ | | | | | | | | | | | ✓ |
| 42 | P1-030-WR-1 | 3.5x70 | ✓ | | | | | | | | | | | ✓ |
| 43 | P1-030-WR-2 | 3.5x70 | ✓ | | | | | | | | | | | ✓ |
| 44 | P2-030-WR-1 | 3.5x70 | ✓ | | | | | | | | | | | ✓ |
| 45 | P2-030-WR-2 | 3.5x70 | ✓ | | | | | | | | | | | ✓ |
| 46 | P-030-50V-105 | 3.5x70 | ✓ | | | | | | | | | | | ✓ |
| 47 | P-030-50V-106 | 4x4 | ✓ | | | | | | | | | | | ✓ |
| 48 | P-030-PV-052 | 4x4 | ✓ | | | | | | | | | | | ✓ |
| 49 | P-030-PV-060 | 4x4 | ✓ | | | | | | | | | | | ✓ |
| 50 | | | | | | | | | | | | | | |
| 51 | | | | | | | | | | | | | | |
| 52 | | | | | | | | | | | | | | |
| 53 | | | | | | | | | | | | | | |

Remarks :-

Reference :-

PETROJET

ENPP Sherif

PMC

Island



Enppi

PETROJET

EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER

RFI-207

INSTRUMENT TYPE:

INSPECTION DATE & TIME

DOCUMENT No.
ITR-EL-0006A

DISCIPLINE
ELECTRICAL

SYSTEM NO.:

SHEET NO

SERIAL:

SERVICE VOLTAGE:
220 V

TEST VOLTAGE:
1kv

AREA / PACKAGE:

| N O | Item/Tag NO. | CABLE SIZE | Continuity Test | PHASE TO PHASE "M.Ohm" | | | PHASE TO NUETRAL "M.Ohm" | | | PHASES & NUETRAL TO ARMOR "M.Ohm" | | | RESULT | |
|--------|-----------------|---------------|--------------------|------------------------|-------|-------|-----------------------------|------|------|--------------------------------------|--------|--------|--------|------|
| | | | | BR-BK | BR-GR | BK-GR | BR-B | BK-B | GR-B | BR-ARM | BK-ARM | GR-ARM | Pass | FAIL |
| 1 | N1-030-EPN3-LTG | 3*10 | ✓ | | | | 0.1 | | | | | | | |
| 2 | E1-030-EPN3-LTG | 4*10 | ✓ | | | | 0.1 | | | | | | | |
| 3 | E2-030-EPN3-LTG | 4*10 | ✓ | | | | 0.1 | | | | | | | |
| 4 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | |

Remarks :-

Reference :-

| | | | | | |
|-----------|--|-------|--|-----|--|
| PETROJET | | ENPPI | | PMC | |
| NAME : | | | | | |
| SIGNATURE | | | | | |
| DATE | | | | | |

ITR-EL-0006A



Enppi

EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER

REF-172

INSTRUMENT TYPE:

INSPECTION DATE & TIME

SERIAL:

SERVICE VOLTAGE:
220 v

DOCUMENT NO
ITR-EL-0006A

DISPUNE
ELECTRICAL

SYSTEM NO :

SHEET NO

AREA / PACKAGE:

| N O | Item/Tag NO. | CABLE SIZE | Continuity Test | PHASE TO PHASE "M.Ohm" | | | PHASE TO NUETRAL "M.Ohm" | | | PHASES & NUETRAL TO ARMOR "M.Ohm" | | | | RESULT | |
|--------|----------------|---------------|--------------------|------------------------|-------|-------|-----------------------------|------|------|--------------------------------------|--------|--------|-------|--------|------|
| | | | | BR-BK | BR-GR | BK-GR | BR-B | BK-B | GR-B | BR-ARM | BK-ARM | GR-ARM | B-ARM | Pass | FAIL |
| 1 | L1-030-EPMA-FT | 4X10 | ✓ | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | | | | ✓ | |
| 2 | L2-030-EPMA-FT | 4X10 | ✓ | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | | | | ✓ | |
| 3 | L3-030-EPMA-FT | 4X10 | ✓ | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | | | | ✓ | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | 1 | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |

Remarks :-

Remarks :-

Reference :-

| | | | |
|-----------|----------|-------|-----|
| NAME : | PETROJET | ENPPI | PMC |
| SIGNATURE | | | |
| DATE | | | |

ITR-EL-0006A



Enppi

EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER

RPI-153

INSTRUMENT TYPE:

INSPECTION DATE & TIME

DOCUMENT No.
ITR-EL-0006A

SYSTEM NO.

SHEET NO

DISCIPLINE
ELECTRICAL

SERIAL:

SERVICE VOLTAGE:
220 v

TEST VOLTAGE:
1kv

AREA / PACKAGE:

| N O | | Item/Tag NO. | CABLE SIZE | Continuity Test | PHASE TO PHASE "M.Ohm" | | | PHASE TO NEUTRAL "M.Ohm" | | | PHASES & NEUTRAL TO ARMOR "M.Ohm" | | | | RESULT | | |
|-----|--|--------------|------------|-----------------|------------------------|-------|-------|--------------------------|------|------|-----------------------------------|--------|--------|-------|--------|------|--|
| | | | | | BR-BK | BR-GR | BK-GR | BR-B | BK-B | GR-B | BR-ARM | BK-ARM | GR-ARM | B-ARM | Pass | FAIL | |
| 1 | | | | | ✓ | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | | | | ✓ | |
| 2 | | | | | ✓ | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | | | | ✓ | |
| 3 | | | | | ✓ | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | | | | ✓ | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | |

Remarks :-

AREA / PACKAGE:

TEST VOLTAGE 1kv

220 v

Remarks :-

Reference :-

| | | | |
|-----------|----------|------|-----|
| NAME | PETROJET | ENPP | PMC |
| SIGNATURE | | | |
| DATE | | | |

ITR-EL-0006A



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

12.07- Electrical Cables Termination Certificates



Owner : Egyptian General Petroleum Corporation (EGPC)
Contractor : CONSORTIUM (ENPPI / PETROJET)
Project No : 01251-100-030
Document No : ITR-QC-000
Revision No : 00

ACTIVITY :
NOTIFICATION NO. :
PTJ-ELE-RFI- :
DISCIPLINE :
CABLE TERMINATION AND TEST
ELEC

DATE : 28/06/2021

| NO. | DESCRIPTION | LOCATION | DATE / TIME | INSPECTION | REMARKS |
|-----|---------------|------------|-------------|------------|---------|
| 36 | P-030-MOV-004 | FIELD | | | |
| 37 | P-030-MOV-005 | FIELD | | | |
| 38 | P-030-MOV-007 | FIELD | | | |
| 39 | P-030-MOV-008 | FIELD | | | |
| 40 | P-030-LPDP-1 | FIELD | | | |
| 41 | P1-030-WR-JB | SUBSTATION | | | |
| 42 | P1-030-WR-1 | FIELD | | | |
| 43 | P1-030-WR-2 | FIELD | | | |
| 44 | P2-030-WR-1 | SUBSTATION | | | |
| 45 | P2-030-WR-2 | FIELD | | | |
| 46 | P-030-SOV-105 | FIELD | | | |
| 47 | P-030-SOV-106 | FIELD | | | |
| 48 | P-030-PV-052 | FIELD | | | |
| 49 | P-030-PV-060 | FIELD | | | |
| 50 | | | | | |
| 51 | | | | | |
| 52 | | | | | |
| 53 | | | | | |
| 54 | | | | | |

NOTE: Inspection result : A - Approved B - Reject C - Approved with Comment

| | | | |
|-----------|----------|-------|-----|
| NAME : | PETROJET | ENPPI | PMC |
| SIGNATURE | | | |
| DATE | | | |

CABLE TERMINATION AND SPLICING

SYSTEM NO.:

INSPECTION REPORT NUMBER

INSPECTION DATE & TIME

ITR NUMBER

DISCIPLINE

SHEET NO
1 OF 1

Item/Tag NO.

For All Cables tags in PTJ-ELE-RFI.

Type :-

Core:

Size:

NO.

Description of check

ACCEPT

REJECT

N/A.

1

Check cable glands are correct type and size as per cable schedule.

2

Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.

3

Check cable tag is done correctly.

4

Test and confirm conductor, phase continuity.

5

Check insulation resistance test (megger) is completed *

6

Check Hi-pot test is completed, only for MV/HV cables ***

7

Connect all cores at both ends and confirm all connections are correct as per termination diagram.

8

Confirm spare cores, screens are earthed and conform to design drawings/specifications

9

Check enclosure cover is installed, no damages and no bolts are missing

10

Calibration test certificate of testing equipment to be checked.

Remarks :

* : ITR-EL-006A/B

** : ITR-EL-008

DATE

SIGNATURE

NAME :

PETROJET

ENPPI

PMC

ITR-EL-0009

| | |
|---------------------------|---|
| Owner : | Egyptian General Petroleum Corporation (EGPC) |
| Contractor | CONSORTIUM (ENPPI / PETROJET) |
| Project No: 01251-100-030 | |
| Document No: ITR-QC-0001 | |
| Revision No: 00 | |

REQUEST FOR INSPECTION

ACTIVITY : LIGHTING FIXTURES INSTALLATION/TERMINATION

NOTIFICATION NO. : PTJ-ELE-RFI-171



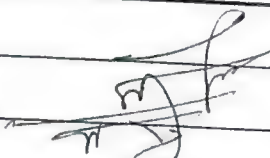
DATE : 4/14/2021

DISCIPLINE : ELE

| NO. | DESCRIPTION | LOCATION | DATE / TIME | INSPECTION | REMARKS |
|-----|-----------------|------------|-------------|--------------------|---------|
| | M3DP QF05 | 6 FIXTURES | | PETROJET ENPPI PMC | |
| | M3DP QF06 | 6 FIXTURES | | | |
| | M3DP QF07 | 6 FIXTURES | | | |
| | L1-030-EPMA3-F1 | | | | |
| | L7-030-EPMA3-F1 | | | | |
| | L3-030-EPMA3-F1 | | | | |

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

| | | | |
|-----------|---|---|---|
| NAME | PETROJET | ENPPI | PMC |
| SIGNATURE |  |  |  |
| DATE | | | |

EGPC CRUDE OIL TANK FARM AGROOD AREA (MODULE 1 & 2)



LIGHTING SYSTEM

LIGHTING FIXTURE INSTALLATION CHECK LIST

| | | | | | | | | | |
|--|--|---|--|---|--|---|--|--|--|
| INSPECTION REPORT NUMBER | | INSPECTION DATE & TIME | | ITR NUMBER | | DISCIPLINE | | SHEET NO | |
| RFL 149 | | | | ITR-EL-0003 | | ELECTRICAL | | | |
| TAG/CIRCUIT NO | | PANEL | | AREA/PACKAGE | | SYSTEM NO | | | |
| LAMP TYPE: | | HP SODIUM | | LED | | | | | |
| <input type="checkbox"/> FLOURESCENT | | <input type="checkbox"/> GROUND STANCHION | | <input type="checkbox"/> PLATFORM STANCHION | | <input type="checkbox"/> BRACKET TYPE | | <input type="checkbox"/> CEILING MOUNTED | |
| <input type="checkbox"/> STREET LIGHTING | | <input type="checkbox"/> FLOODLIGHT TOWER | | <input type="checkbox"/> FENCE LIGHTING | | <input type="checkbox"/> GUARD LIGHTING | | | |
| ITEM / TAG NO | | TYPE | | | | | | | |

| NO. | INSPECTION | RESULT | | |
|-----|---|--------|--------|-----|
| | | ACCEPT | REJECT | N/A |
| 1 | No damage has been found to fixtures/junction box. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | ✓ | | |
| 4 | Lighting pole and support as per drawings. | ✓ | | |
| 5 | Welding (if required) and touch up. | ✓ | | |
| 6 | Anchor bolting / Bolt tightening. | ✓ | | |
| 7 | Mounting height / orientation / direction / vertical alignment as per drawings. | ✓ | | |
| 8 | Check cable termination, connection, and cable marker. | ✓ | | |
| 9 | Assembling compartments properly installed. | ✓ | | |
| 10 | Conduit /conduit filled by compound. | ✓ | | |
| 11 | Earthing and bonding properly installed. | ✓ | | |
| 12 | Lamp test | ✓ | | |

REMARKS:

REFERENCE DOCUMENTS:

| | | | |
|-----------|----------|-------|-----|
| NAME | PETROJET | ENPRI | PMC |
| SIGNATURE | | | |
| DATE | | | |

ITR-EL-0003



CABLE TERMINATION AND SPLICING

INSPECTION REPORT NUMBER

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0009

DISCIPLINE

ELEC

SHEET NO

1 OF 1

Item/Tag NO.

Type :-

Core:

Size:

Description of check

NO.

Check cable glands are correct type and size as per cable schedule.

Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins

Check cable tag is done correctly.

Test and confirm conductor, phase continuity.

Check insulation resistance test (megger) is completed *

Check Hi-pot test is completed, only for MV/HV cables ***

Connect all cores at both ends and confirm all connections are correct as per termination diagram.

Confirm spare cores, screens are earthed and conform to design drawings/specifications

Check enclosure cover is installed, no damages and no bolts are missing

Calibration test certificate of testing equipment to be checked.

Remarks :

PETROJET

ENPPI

Islam Sherif

PMC

DATE

SIGNATURE

NAME

ITR-EL-0009

Owner :

Egyptian General Petroleum Corporation (EGPC)

Contractor

CONSORTIUM (ENPPI / PETROJET)

Project No: 01251-100-030

Document No: ITR-QC-0001

Revision No.: 00

REQUEST FOR INSPECTION

ACTIVITY : LIGHTING FIXTURES INSTALLATION

NOTIFICATION NO. : PTJ-ELE-RFI-116

DISCIPLINE : ELE

DATE : 23/1/2021

| NO. | DESCRIPTION | LOCATION | DATE / TIME | INSPECTION | REMARKS |
|-----|-----------------------------|------------|-------------|------------|---------|
| | HIGH MAST LIGHTING FIXTURES | AGROOD#01 | | | |
| | MADP-Q705 | 6 FIXTURES | | | |
| | MADP Q706 | 6 FIXTURES | | | |
| | MADP Q707 | 6 FIXTURES | | | |
| | L1-030-EPMA-FT | | | | |
| | L2-030-EPMA-FT | | | | |
| | L3-030-EPMA-FT | | | | |

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

PETROJET

ENPPI

PMC

NAME :

SIGNATURE

DATE

LIGHTING SYSTEM

INSPECTION AND TEST REPORT FOR

LIGHTING FIXTURE INSTALLATION CHECK LIST

INSPECTION REPORT NUMBER _____

INSPECTION DATE & TIME _____

ITR NUMBER _____

DISCIPLINE _____

SHEET NO _____

RFI 17

ITR-EL-0003

ELECTRICAL

TAG / CIRCUIT No. : _____

PANEL : _____

AREA/PACKGE : _____

SYSTEM NO. : _____

LAMP TYPE: ☐ FLOURESCENT ☐ HP SODIUM ☒ LED


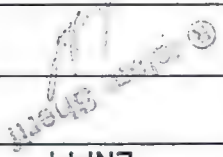

FIXTURE TYPE: ☐ GROUND STANCHION ☐ PLATFORM STANCHION ☐ BRACKET TYPE ☐ CEILING MOUNTED

☐ STREET LIGHTING ☐ FLOODLIGHT TOWER ☐ FENCE LIGHTING ☐ GUARD LIGHTING

| NO. | INSPECTION | | | RESULT |
|-----|------------|--------|-----|--------|
| | ACCEPT | REJECT | N/A | |
| 1 | ✓ | | | |
| 2 | ✓ | | | |
| 3 | ✓ | | | |
| 4 | ✓ | | | |
| 5 | | | ✓ | |
| 6 | ✓ | | | |
| 7 | ✓ | | | |
| 8 | ✓ | | | |
| 9 | ✓ | | | |
| 10 | ✓ | | | |
| 11 | ✓ | | | |
| 12 | ✓ | | | |

REMARKS:

REFERENCE DOCUMENTS:

| | | | |
|-----------|---|---|---|
| | PETROJET | ENPPI | PMC |
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |



CABLE TERMINATION AND SPLICING

INSPECTION AND TEST REPORT FOR

SYSTEM NO:

INSPECTION REPORT NUMBER

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0009

INST

SHEET NO
1 OF 1

PTJ-INST-RFI

Item/Tag NO.

Type :-

Core:

Size:

Description of check

NO.

Check cable glands are correct type and size as per cable schedule.

Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins

Check cable tag is done correctly.

Test and confirm conductor, phase continuity.

Check insulation resistance test (megger) is completed *

Check Hi-pot test is completed, only for MV/HV cables **

Connect all cores at both ends and confirm all connections are correct as per termination diagram.

Confirm spare cores, screens are earthed and conform to design drawings/specifications

Check enclosure cover is installed, no damages and no bolts are missing

Calibration test certificate of testing equipment to be checked.

Remarks :

*1 : ITR-EL-006A/B

*11 : ITR-EL-008

NAME :

PETROJET

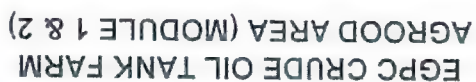
ENPPI

PMC

SIGNATURE

DATE

ITR-EL-0009



Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030
:01251-100-031

Document No: ITR-QC-0001
Revision No.: 00

REQUEST FOR INSPECTION

LIGHTING FIXTURE INSTALLATION / TERMINATION

NOTIFICATION NO.

PTJ-ELE-RFL204 207

373

DATE :

5/22/2021

[illegible]

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

PETROJET

ENPPI


PMC

DATE _____



SIGNATURE

NAME :

1TR-QC-0001

|  EGPC CRUDE OIL TANK FARM AGROOD AREA (MODULE 1 & 2) | | Owner : Egyptian General Petroleum Corporation (EGPC) | | Contractor CONSORTIUM (ENPPI / PETROJET) | | | |
|--|--|--|-------------|---|-------|-----|---------|
| | | Project No: 01251-100-030 Document No: ITR-QC-0001 Revision No: 00 | | REQUEST FOR INSPECTION | | | |
| ACTIVITY : LIGHTING FIXTURES INSTALLATION / TERMINATION | | | | | | | |
| NOTIFICATION NO. : PTJ-ELE-RFI204 207 | | | | | | | |
| DATE : 22/5/2021 | | | | | | | |
| DISCIPLINE : ELE | | | | | | | |
| NO. | DESCRIPTION | LOCATION | DATE / TIME | INSPECTION | | | REMARKS |
| | | | | PETROJET | ENPPI | PMC | |
| | TANK 03 LIGHTING FIXTURES INSTALLATION / TERMINATION | AGROOD#01 | 22/5/2021 | | | | |
| | N1-030-EPM3-LTG | | | | | | |
| | E1-030-EPM3-LTG | | | | | | |
| | E2-030-EPM3-LTG | | | | | | |
| NOTE: Inspection result : A - Approved B - Reject C - Approved with Comment | | | | | | | |
| NAME : PETROJET ENPPI PMC | | | | | | | |
| SIGNATURE : | | | | | | | |
| DATE : | | | | | | | |

ITR-QC-0001

| | | | |
|---|--|--|---|
|  | EGPC CRUDE OIL TANK FARM AGROOD AREA (MODULE 1 & 2) | |  |
| | LIGHTING SYSTEM | | |

INSPECTION AND TEST REPORT FOR

LIGHTING FIXTURE INSTALLATION CHECK LIST

| | | | | | | |
|--------------------------|------------------------|------------|-------------|------------|------------|----------|
| INSPECTION REPORT NUMBER | INSPECTION DATE & TIME | ITR NUMBER | ITR-EL-0003 | DISCIPLINE | ELECTRICAL | SHEET NO |
|--------------------------|------------------------|------------|-------------|------------|------------|----------|

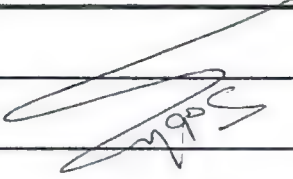

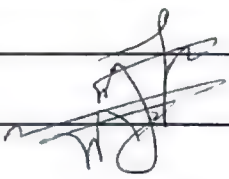
| | | | |
|--------------------|---|--|---|
| TAG / CIRCUIT No.: | PANEL: | AREA/PACKGE: | SYSTEM NO.: |
| LAMP TYPE: | <input type="checkbox"/> FLOURESCENT | <input type="checkbox"/> HP SODIUM | <input checked="" type="checkbox"/> LED |
| FIXTURE TYPE: | <input type="checkbox"/> GROUND STANCHION | <input type="checkbox"/> PLATEFORM STANCHION | <input type="checkbox"/> BRACKET TYPE |
| | <input type="checkbox"/> STREET LIGHTING | <input checked="" type="checkbox"/> FLOODLIGHT TOWER | <input type="checkbox"/> FENCE LIGHTING |
| | <input type="checkbox"/> GUARD LIGHTING | | |

| NO. | INSPECTION | RESULT | | |
|-----|------------|--------|--------|------|
| | | ACCEPT | REJECT | N/A. |




| | | | | |
|----|---|---|--|---|
| 1 | No damage has been found to fixtures/junction box. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | ✓ | | |
| 4 | Lighting pole and support as per drawings. | ✓ | | |
| 5 | Welding (if required) and touch up. | | | ✓ |
| 6 | Anchor bolting / Bolt tightening. | ✓ | | |
| 7 | Mounting height / orientation / direction / vertical alignment as per drawings. | ✓ | | |
| 8 | Check cable termination, connection, and cable marker. | ✓ | | |
| 9 | Assembling compartments properly installed. | ✓ | | |
| 10 | Conduit /conduit filled by compound. | | | ✓ |
| 11 | Earthing and bonding properly installed. | ✓ | | |
| 12 | Lamp test | | | ✓ |

| |
|----------|
| REMARKS: |
|----------|

| |
|----------------------|
| REFERENCE DOCUMENTS: |
|----------------------|

| | | | |
|-----------|--|---|---|
| NAME : | PETROJET | ENPPI | PMC |
| SIGNATURE |  |  |  |
| DATE | | | |

ITR-EL-0003

| | | | |
|---|---|---|---|
|  | EGPC CRUDE OIL TANK FARM AGROOD AREA (MODULE 1 & 2) |  |  |
|---|---|---|---|

LIGHTING SYSTEM

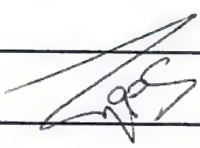
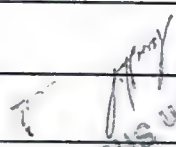
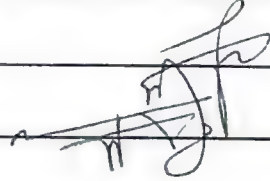
| | | | |
|---|------------------------|-------------|------------|
| POWER OUTLET INSTALLATION CHECK LIST | | | |
| INSPECTION REPORT NUMBER | INSPECTION DATE & TIME | ITR NUMBER | DISCIPLINE |
| RFL 204 202 | | ITR-EL-0004 | ELECTRICAL |
| SHEET NO | | | |

| | | | | |
|--|--------------|---------|---------------|--------------|
| TAG : | CIRCUIT No : | PANEL : | AREA/PACKGE : | SYSTEM NO. : |
| TYPE: <input checked="" type="checkbox"/> WELDING RECEPTACLE <input type="checkbox"/> CONVENIENCE OUTLET | | | | |
| ITEM / TAG NO. | TYPE | | | |

| NO. | INSPECTION | RESULT | |
|-----|--|--------|--------|
| | | ACCEPT | REJECT |
| 1 | No damage has been found to devices/switches. | ✓ | |
| 2 | Correct type / size / identification as per drawings. | ✓ | |
| 3 | Identification / name plate attached correctly. | ✓ | |
| 4 | Welding (if required) and touch up. | | ✓ |
| 5 | Anchor bolting / Bolt tightening. | ✓ | |
| 6 | Mounting height / orientation / direction as per drawings. | ✓ | |
| 7 | Check cable termination, connection, and cable marker. | ✓ | |
| 8 | Assembling compartments properly installed. | ✓ | |
| 9 | Conduit /conduit filled by compound. | | ✓ |
| 10 | Earthing and bonding properly installed. | ✓ | |

REMARKS:

REFERENCE DOCUMENTS:

| | | | |
|-----------|--|---|---|
| NAME : | PETROJET | ENPPI | PMC |
| SIGNATURE |  |  |  |
| DATE | | | |

ITR-EL-0004

CABLE TERMINATION AND SPLICING

INSPECTION REPORT NUMBER

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0009

DISPLINE

ELEC

SHEET NO
1 OF 1

SYSTEM NO.:

Item/Tag NO.

Type :-

Core:

Size:

Description of check

NO.

Check cable glands are correct type and size as per cable schedule.

Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins

satisfactory.

Check cable tag is done correctly.

Test and confirm conductor, phase continuity.

Check insulation resistance test (megger) is completed *

Check Hi-pot test is completed, only for MV/HV cables **

Connect all cores at both ends and confirm all connections are correct as per termination diagram.

Confirm spare cores, screens are earthed and conform to design drawings/specifications

Check enclosure cover is installed, no damages and no bolts are missing

Calibration test certificate of testing equipment to be checked.

Remarks :

PETROJET

ENPPI

PMC

NAME :

SIGNATURE

DATE

ITR-EL-0009



Enppi

EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001
Revision No. : 00

REQUEST FOR INSPECTION

ACTIVITY : LIGHTING FIXTURES INSTALLATION

NOTIFICATION NO. : PTJ-ELE-RFI-215 DISCIPLINE : ELE

DATE : 6/16/2021

| NO. | DESCRIPTION | LOCATION | DATE / TIME | INSPECTION | | | REMARKS |
|-----|--|------------------|-------------|------------|-------|-----|---------|
| | | | | PETROJET | ENPPI | PMC | |
| | TANK 04 LIGHTING FIXTURES INSTALLATION | AGROOD#02 | 16-Jun-21 | | | | |
| | N1-030-EPM4-LTG | 9 FIXTURES +1 JB | QF09 | | | | |
| | E1-030-EPM4-LTG | 9 FIXTURES | QF14 | | | | |
| | E2-030-EPM4-LTG | 9 FIXTURES +1 JB | QF15 | | | | |
| | P1-030-EPM4-CR-1 | 1 PS | QF02 | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

تمت المعاينة بنجاح وجميع الأعمال متوافقة مع المواصفات.

| | PETROJET | ENPPI | PMC |
|-----------|----------|--------------|-----|
| NAME : | | Islam Sherif | |
| SIGNATURE | | | |
| DATE | | | |

ITR-QC-0001

**Enppi****EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)****LIGHTING SYSTEM**

INSPECTION AND TEST REPORT FOR

LIGHTING FIXTURE INSTALLATION CHECK LIST

INSPECTION REPORT NUMBER

RFL-219

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0003

DISCIPLINE

ELECTRICAL

SHEET NO

TAG / CIRCUIT No.:

PANEL:

AREA/PACKAGE:

SYSTEM NO.:

LAMP TYPE:

☐ FLOURESCENT☐ HP SODIUM☒ LED

FIXTURE TYPE:

☐ GROUND STANCHION☐ PLATFORM STANCHION☐ BRACKET TYPE☐ CEILLING MOUNTED☐ STREET LIGHTING☒ FLOODLIGHT TOWER☐ FENCE LIGHTING☐ GUARD LIGHTING

ITEM / TAG NO.

TYPE

| NO. | INSPECTION | RESULT | | |
|-----|---|--------|--------|------|
| | | ACCEPT | REJECT | N/A. |
| 1 | No damage has been found to fixtures/junction box. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | | ✓ | |
| 4 | Lighting pole and support as per drawings. | ✓ | | |
| 5 | Welding (if required) and touch up. | ✓ | | |
| 6 | Anchor bolting / Bolt tightening. | ✓ | | |
| 7 | Mounting height / orientation / direction / vertical alignment as per drawings. | ✓ | | |
| 8 | Check cable termination, connection, and cable marker. | ✓ | | |
| 9 | Assembling compartments properly installed. | ✓ | | |
| 10 | Conduit /conduit filled by compound. | | ✓ | |
| 11 | Earthing and bonding properly installed. | ✓ | | |
| 12 | Lamp test | ✓ | | |

REMARKS:

REFERENCE DOCUMENTS:

| | PETROJET | ENPPI | PMC |
|-----------|----------|-------|-----|
| NAME : | | | |
| SIGNATURE | | | |
| DATE | | | |

ITR-EL-0003

**Enppi****EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)****LIGHTING SYSTEM**

INSPECTION AND TEST REPORT FOR

POWER OUTLET INSTALLATION CHECK LIST

INSPECTION REPORT NUMBER

RFI 213

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0004

DISCIPLINE

ELECTRICAL

SHEET NO

TAG :

CIRCUIT No :

PANEL :

AREA/PACKGE :

SYSTEM NO.:

TYPE:

☒ WELDING RECEPTACLE☐ CONVIENCE OUTLET

ITEM / TAG NO.

TYPE

| NO. | INSPECTION | RESULT | | |
|-----|--|--------|--------|------|
| | | ACCEPT | REJECT | N/A. |
| 1 | No damage has been found to devices/switches. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | | ✓ | |
| 4 | Welding (if required) and touch up. | ✓ | | |
| 5 | Anchor bolting / Bolt tightening. | ✓ | | |
| 6 | Mounting height / orientation / direction as per drawings. | ✓ | | |
| 7 | Check cable termination, connection, and cable marker. | ✓ | | |
| 8 | Assembling compartments properly installed. | ✓ | | |
| 9 | Conduit /conduit filled by compound. | | ✓ | |
| 10 | Earthing and bonding properly installed. | ✓ | | |

REMARKS:

REFERENCE DOCUMENTS:

| | PETROJET | ENPPI | PMC |
|-----------|----------|-------|-----|
| NAME : | | | |
| SIGNATURE | | | |
| DATE | | | |

ITR-EL-0004

**Enppi**EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)

Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : LIGHTING FIXTURES INSTALLATION

NOTIFICATION NO. : PTJ-ELE-RFI- 229 DISCIPLINE : ELE

DATE : 6/27/2021

| NO. | DESCRIPTION | LOCATION | DATE / TIME | INSPECTION | | | REMARKS |
|-----|---------------------------------------|--------------|-------------------------|------------|-------|-----|---------------------------|
| | | | | PETROJET | ENPPI | PMC | |
| | LIGHTING FIXTURES INSTALLATION | AGROOD#02 | 27-Jun-21 | | | | |
| | P1-030-LPDP-CR-JB | JB+3PS | | | | | |
| 1 | P2-030-LPDP-CR-JB | JB+2PS | (Socket No(2)) | | | | not installed (Done) Sobh |
| | P3-030-LPDP-CR-1 | 4PS | | | | | |
| | N4-030-LPDP-LTG | JB+7FIXTURES | (Fixtures No (5,6,7)) | | | | not installed (Done) Sobh |
| | E4-030-LPDP-LTG | JB+9FIXTURES | (Fixtures No (6,7,8,9)) | | | | not installed (Done) Sobh |
| | N5-030-LPDP-LTG | 8FICXTURES | | | | | |
| | N6-030-LPDP-LTG | 8FICXTURES | | | | | |
| | E6-030-LPDP-LTG | 8FICXTURES | | | | | |
| | E5-030-LPDP-LTG | 8FICXTURES | | | | | |
| | E6-030-LPDP-LTG 8Ficxtures | | | | | | |

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

- (1) Fixtures boxes plugs are missing (Done) Sobh
 (2) S.S tag missing (Done) Sobh

| | PETROJET | ENPPI | PMC |
|-----------|----------|--------------|-----|
| NAME : | | | |
| SIGNATURE | Sobh | Islam Sherif | RH |
| DATE | | | |

ITR-QC-0001

**Enppi**EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)

Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : LIGHTING FIXTURES INSTALLATION

NOTIFICATION NO. : PTJ-ELE-RFI- 229 DISCIPLINE : ELE

DATE : 6/27/2021

| NO. | DESCRIPTION | LOCATION | DATE / TIME | INSPECTION | | | REMARKS |
|-----|--------------------------------|--------------|------------------------------|------------|-------|-----|---------|
| | | | | PETROJET | ENPPI | PMC | |
| | LIGHTING FIXTURES INSTALLATION | AGROOD#01 | 27-Jun-21 | | | | |
| | N1-030-LPDP-LTG | JB+9FIXTURES | | | | | |
| | E1-030-LPDP-LTG | JB+7FIXTURES | | | | | |
| | N2-030-LPDP-LTG | JB+8FIXTURES | | | | | |
| | E2-030-LPDP-LTG | 5FIXTURES | | | | | |
| | N3-030-LPDP-LTG | 4FIXTURES | | | | | |
| | E3-030-LPDP-LTG | JB+7FIXTURES | | | | | |
| | | | Fixture No (7) Not installed | | | | |

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

| | PETROJET | ENPPI | PMC |
|-----------|----------|-------|-----|
| NAME : | | | |
| SIGNATURE | | | |
| DATE | | | |

ITR-QC-0001



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)



LIGHTING SYSTEM

INSPECTION AND TEST REPORT FOR

LIGHTING FIXTURE INSTALLATION CHECK LIST

| | | | | |
|-------------------------------------|------------------------|---------------------------|------------------------|----------|
| INSPECTION REPORT NUMBER RFI 229 | INSPECTION DATE & TIME | ITR NUMBER ITR-EL-0003 | DISPLINE ELECTRICAL | SHEET NO |
|-------------------------------------|------------------------|---------------------------|------------------------|----------|

| | | | |
|---|---------|---------------|-------------|
| TAG/ CIRCUIT No : | PANEL : | AREA/PACKGE : | SYSTEM NO.: |
| LAMP TYPE: <input type="checkbox"/> FLOURESCENT <input type="checkbox"/> HP SODUIM <input checked="" type="checkbox"/> LED | | | |
| FIXTURE TYPE: <input type="checkbox"/> GROUND STANCHION <input type="checkbox"/> PLATFORM STANCHION <input type="checkbox"/> BRACKET TYPE <input type="checkbox"/> CEILLING MOUNTED | | | |
| <input type="checkbox"/> STREET LIGHTING <input checked="" type="checkbox"/> FLOODLIGHT TOWER <input type="checkbox"/> FENCE LIGHTING <input type="checkbox"/> GUARD LIGHTING | | | |
| ITEM / TAG NO. | TYPE | | |

| NO. | INSPECTION | RESULT | | |
|-----|---|--------|--------|------|
| | | ACCEPT | REJECT | N/A. |
| 1 | No damage has been found to fixtures/junction box. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | | ✓ | |
| 4 | Lighting pole and support as per drawings. | ✓ | | |
| 5 | Welding (if required) and touch up. | | | ✓ |
| 6 | Anchor bolting / Bolt tightening. | ✓ | | |
| 7 | Mounting height / orientation / direction / vertical alignment as per drawings. | ✓ | | |
| 8 | Check cable termination, connection, and cable marker. | ✓ | | |
| 9 | Assembling compartments properly installed. | ✓ | | |
| 10 | Conduit /conduit filled by compound. | ✓ | | |
| 11 | Earthing and bonding properly installed. | | ✓ | |
| 12 | Lamp test | | | ✓ |

REMARKS:

REFERENCE DOCUMENTS:

| | PETROJET | ENPPI | PMC |
|-----------|----------|-------|-----|
| NAME : | | | |
| SIGNATURE | | | |
| DATE | | | |

ITR-EL-0003

**Enppi****EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)****LIGHTING SYSTEM**

INSPECTION AND TEST REPORT FOR

POWER OUTLET INSTALLATION CHECK LIST

INSPECTION REPORT NUMBER

RFI 201 229

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0004

DISPLINE

ELECTRICAL

SHEET NO

TAG :

CIRCUIT No :

PANEL :

AREA/PACKGE :

SYSTEM NO.:

TYPE:

☒ WELDING RECEPTACLE☐ CONVIENCE OUTLET

ITEM / TAG NO.

TYPE

| NO. | INSPECTION | RESULT | | |
|-----|--|--------|--------|------|
| | | ACCEPT | REJECT | N/A. |
| 1 | No damage has been found to devices/switches. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | | ✓ | |
| 4 | Welding (if required) and touch up. | | | ✓ |
| 5 | Anchor bolting / Bolt tightening. | ✓ | | |
| 6 | Mounting height / orientation / direction as per drawings. | ✓ | | |
| 7 | Check cable termination, connection, and cable marker. | ✓ | | |
| 8 | Assembling compartments properly installed. | ✓ | | |
| 9 | Conduit /conduit filled by compound. | ✓ | | |
| 10 | Earthing and bonding properly installed. | | ✓ | |

REMARKS:

REFERENCE DOCUMENTS:

| | PETROJET | ENPPI | PMC |
|-----------|----------|-------|-----|
| NAME : | | | |
| SIGNATURE | | | |
| DATE | | | |

ITR-EL-0004

**Enppi**EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)

Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : LIGHTING FIXTURES INSTALLATION

NOTIFICATION NO. : PTJ-ELE-RFI- 245 DISCIPLINE : ELE

DATE : 7/2/2021

| NO. | DESCRIPTION | LOCATION | DATE / TIME | INSPECTION | | | REMARKS |
|-----|--------------------------------|------------------|-------------|------------|-------|-----|---------|
| | | | | PETROJET | ENPPI | PMC | |
| | LIGHTING FIXTURES INSTALLATION | AGROOD#01 | 2-Jul-21 | | | | |
| | M2DP QF05 | 6 FIXTURES | | | | | |
| | M2DP QF06 | 6 FIXTURES | | | | | |
| | M2DP QF07 | 6 FIXTURES | | | | | |
| | E1-030-EPM2-LTG | 9 FIXTURES | QF014 | | | | |
| | E2-030-EPM2-LTG | 9 FIXTURES + 1JB | QF015 | | | | |
| | N1-030-EPM2-LTG | 9 FIXTURES + 1JB | QF09 | | | | |
| | P1-030-EPM2-CR-1 | 1 PS | QF02 | | | | |

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

| | PETROJET | ENPPI | PMC |
|-----------|----------|-------|-----|
| NAME : | | | |
| SIGNATURE | | | |
| DATE | | | |

ITR-QC-0001



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)



LIGHTING SYSTEM

INSPECTION AND TEST REPORT FOR

LIGHTING FIXTURE INSTALLATION CHECK LIST

INSPECTION REPORT NUMBER

RFL_17

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0003

DISCIPLINE

ELECTRICAL

SHEET NO

TAG/ CIRCUIT No :

PANEL :

AREA/PACKGE :

SYSTEM NO.:

LAMP TYPE: ☐ FLOURESCENT

☐ HP SODIUM

☒ LED

FIXTURE TYPE: ☒ GROUND STANCHION

☐ PLATFORM STANCHION

☒ BRACKET TYPE

☐ CEILING MOUNTED

☐ STREET LIGHTING

☒ FLOODLIGHT TOWER

☐ FENCE LIGHTING

☐ GUARD LIGHTING

ITEM / TAG NO.

TYPE

| NO. | INSPECTION | RESULT | | |
|-----|---|--------|--------|------|
| | | ACCEPT | REJECT | N/A. |
| 1 | No damage has been found to fixtures/junction box. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | ✓ | | |
| 4 | Lighting pole and support as per drawings. | ✓ | | |
| 5 | Welding (if required) and touch up. | | | ✓ |
| 6 | Anchor bolting / Bolt tightening. | ✓ | | |
| 7 | Mounting height / orientation / direction / vertical alignment as per drawings. | ✓ | | |
| 8 | Check cable termination, connection, and cable marker. | ✓ | | |
| 9 | Assembling compartments properly installed. | | | ✓ |
| 10 | Conduit /conduit filled by compound. | ✓ | | |
| 11 | Earthing and bonding properly installed. | ✓ | | |
| 12 | Lamp test | ✓ | | |

REMARKS:

REFERENCE DOCUMENTS:

| | PETROJET | ENPPI | PMC |
|-----------|----------|---------------|-----|
| NAME : | | ③ Sami Sherif | |
| SIGNATURE | | | |
| DATE | | | |

ITR-EL-0003

**Enppi****EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)****LIGHTING SYSTEM**

INSPECTION AND TEST REPORT FOR

POWER OUTLET INSTALLATION CHECK LIST

INSPECTION REPORT NUMBER

RFI_201

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0004

DISPLINE

ELECTRICAL

SHEET NO

TAG :

CIRCUIT No :

PANEL :

AREA/PACKGE :

SYSTEM NO.:

TYPE:

☒ WELDING RECEPTACLE☐ CONVIENCE OUTLET

ITEM / TAG NO.

TYPE

| NO. | INSPECTION | RESULT | | |
|-----|--|--------|--------|------|
| | | ACCEPT | REJECT | N/A. |
| 1 | No damage has been found to devices/switches. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | ✓ | | |
| 4 | Welding (if required) and touch up. | | | ✓ |
| 5 | Anchor bolting / Bolt tightening. | ✓ | | |
| 6 | Mounting height / orientation / direction as per drawings. | ✓ | | |
| 7 | Check cable termination, connection, and cable marker. | ✓ | | |
| 8 | Assembling compartments properly installed. | | | ✓ |
| 9 | Conduit / conduit filled by compound. | ✓ | | |
| 10 | Earthing and bonding properly installed. | ✓ | | |

REMARKS:

REFERENCE DOCUMENTS:

| | PETROJET | ENPPI | PMC |
|-----------|----------|-------|-----|
| NAME : | | | |
| SIGNATURE | | | |
| DATE | | | |

ITR-EL-0004

**Enppi**EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)

Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : LIGHTING FIXTURES INSTALLATION

NOTIFICATION NO. : PTJ-ELE-RFI-247 DISCIPLINE : ELE

DATE : 29
7/2/2021

| NO. | DESCRIPTION | LOCATION | DATE / TIME | INSPECTION | | | REMARKS |
|-----|--------------------------------|------------------|----------------|------------|-------|-----|---------|
| | | | | PETROJET | ENPPI | PMC | |
| | LIGHTING FIXTURES INSTALLATION | AGROOD#01 | 2-Jul-21 29 | | | | |
| | M1DP QF05 | 6 FIXTURES | | | | | |
| | M1DP QF06 | 6 FIXTURES | | | | | |
| | M1DP QF07 | 6 FIXTURES | | | | | |
| | E1-030-EPM1-LTG | 9 FIXTURES | QF014 | | | | |
| | E2-030-EPM1-LTG | 9 FIXTURES + 1JB | QF015 | | | | |
| | N1-030-EPM1-LTG | 9 FIXTURES + 1JB | QF09 | | | | |
| | P1-030-EPM1-CR-1 | 1 PS | QF02 | | | | |

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

| | PETROJET | ENPPI | PMC |
|-----------|----------|-------|-----|
| NAME : | | | |
| SIGNATURE | | | |
| DATE | | | |

ITR-QC-0001



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)



LIGHTING SYSTEM

INSPECTION AND TEST REPORT FOR

LIGHTING FIXTURE INSTALLATION CHECK LIST

| | | | | |
|----------------------------------|------------------------|---------------------------|------------------------|----------|
| INSPECTION REPORT NUMBER RFI_ | INSPECTION DATE & TIME | ITR NUMBER ITR-EL-0003 | DISPLINE ELECTRICAL | SHEET NO |
|----------------------------------|------------------------|---------------------------|------------------------|----------|

| | | | |
|--|---------|---------------|-------------|
| TAG/ CIRCUIT No : | PANEL : | AREA/PACKGE : | SYSTEM NO.: |
| LAMP TYPE: <input type="checkbox"/> FLOURESCENT <input type="checkbox"/> HP SODUIM <input checked="" type="checkbox"/> LED | | | |
| FIXTURE TYPE: <input type="checkbox"/> GROUND STANCHION <input checked="" type="checkbox"/> PLATEFORM STANCHION <input checked="" type="checkbox"/> BRACKET TYPE <input type="checkbox"/> CEILLING MOUNTED | | | |
| <input type="checkbox"/> STREET LIGHTING <input type="checkbox"/> FLOODLIGHT TOWER <input type="checkbox"/> FENCE LIGHTING <input type="checkbox"/> GUARD LIGHTING | | | |

| | |
|----------------|------|
| ITEM / TAG NO. | TYPE |
|----------------|------|

| NO. | INSPECTION | RESULT | | |
|-----|---|--------|--------|------|
| | | ACCEPT | REJECT | N/A. |
| 1 | No damage has been found to fixtures/junction box. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | ✓ | | |
| 4 | Lighting pole and support as per drawings. | ✓ | | |
| 5 | Welding (if required) and touch up. | | | ✓ |
| 6 | Anchor bolting / Bolt tightening. | ✓ | | |
| 7 | Mounting height / orientation / direction / vertical alignment as per drawings. | ✓ | | |
| 8 | Check cable termination, connection, and cable marker. | ✓ | | |
| 9 | Assembling compartments properly installed. | ✓ | | |
| 10 | Conduit /conduit filled by compound. | ✓ | | |
| 11 | Earthing and bonding properly installed. | ✓ | | |
| 12 | Lamp test | | | ✓ |

REMARKS:

REFERENCE DOCUMENTS:

| | PETROJET | ENPPI | PMC |
|-----------|----------|-------|-----|
| NAME : | | | |
| SIGNATURE | | | |
| DATE | | | |

ITR-EL-0003

**Enppi****EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)****LIGHTING SYSTEM**

INSPECTION AND TEST REPORT FOR

POWER OUTLET INSTALLATION CHECK LIST

INSPECTION REPORT NUMBER

RFI_201

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0004

DISPLINE

ELECTRICAL

SHEET NO

TAG :

CIRCUIT No :

PANEL :

AREA/PACKGE :

SYSTEM NO.:

TYPE:

☒ WELDING RECEPTACLE☐ CONVIENCE OUTLET

ITEM / TAG NO.

TYPE

| NO. | INSPECTION | RESULT | | |
|-----|--|--------|--------|------|
| | | ACCEPT | REJECT | N/A. |
| 1 | No damage has been found to devices/switches. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | ✓ | | |
| 4 | Welding (if required) and touch up. | | | ✓ |
| 5 | Anchor bolting / Bolt tightening. | ✓ | | |
| 6 | Mounting height / orientation / direction as per drawings. | ✓ | | |
| 7 | Check cable termination, connection, and cable marker. | ✓ | | |
| 8 | Assembling compartments properly installed. | ✓ | | |
| 9 | Conduit /conduit filled by compound. | ✓ | | |
| 10 | Earthing and bonding properly installed. | ✓ | | |

REMARKS:

REFERENCE DOCUMENTS:

| | PETROJET | ENPPI | PMC |
|-----------|----------|-------|-----|
| NAME : | | | |
| SIGNATURE | | | |
| DATE | | | |

ITR-EL-0004



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030
:01251-100-031

| | |
|------------|-------------------------------|
| Contractor | CONSORTIUM (ENPPI / PETROJET) |
|------------|-------------------------------|

Document No: ITR-QC-0001
Revision No. : 00

REQUEST FOR INSPECTION

ACTIVITY : LIGHTING FIXTURES INSTALLATION

NOTIFICATION NO. : PTJ-ELE-RFI-252 DISCIPLINE : ELE




DATE : 7/27/2021

[illegible]

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

marked-up to be considered

| | PETROJET | ENPPI | PMC |
|-----------|---|--|---|
| NAME : | | | |
| SIGNATURE |  |  ¹ |  |
| DATE | | | |

ITR-QC-0001



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)



LIGHTING SYSTEM

INSPECTION AND TEST REPORT FOR

LIGHTING FIXTURE INSTALLATION CHECK LIST

| | | | | |
|--------------------------------------|------------------------|---------------------------|--------------------------|----------|
| INSPECTION REPORT NUMBER RFI_ 252 | INSPECTION DATE & TIME | ITR NUMBER ITR-EL-0003 | DISCIPLINE ELECTRICAL | SHEET NO |
|--------------------------------------|------------------------|---------------------------|--------------------------|----------|

| | | | |
|--|---------|---------------|-------------|
| TAG/ CIRCUIT No : | PANEL : | AREA/PACKGE : | SYSTEM NO.: |
| LAMP TYPE: <input type="checkbox"/> FLOURESCENT <input type="checkbox"/> HP SODIUM <input checked="" type="checkbox"/> LED | | | |
| FIXTURE TYPE: <input type="checkbox"/> GROUND STANCHION <input type="checkbox"/> PLATEFORM STANCHION <input type="checkbox"/> BRACKET TYPE <input type="checkbox"/> CEILLING MOUNTED | | | |
| <input checked="" type="checkbox"/> STREET LIGHTING <input type="checkbox"/> FLOODLIGHT TOWER <input type="checkbox"/> FENCE LIGHTING <input type="checkbox"/> GUARD LIGHTING | | | |
| ITEM / TAG NO. | TYPE | | |



| NO. | INSPECTION | RESULT | | |
|-----|--|--------|--------|------|
| | | ACCEPT | REJECT | N/A. |
| 1 | No damage has been found to fixtures/junction box. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | ✓ | | |
| 4 | Lighting pole and support as per drawings. | ✓ | | |
| 5 | Welding (if required) and touch up. | | | ✓ |
| 6 | Anchor bolting / Bolt tightening. | ✓ | | |
| 7 | Mounting height / orientation / direction / vertical alignent as per drawings. | ✓ | | |
| 8 | Check cable termination, connection, and cable marker. | ✓ | | |
| 9 | Assembling compartments properly installed. | ✓ | | |
| 10 | Conduit /conduit filled by compound. | ✓ | | |
| 11 | Earthing and bonding properly installed. | ✓ | | |
| 12 | Lamp test | ✓ | | |

REMARKS:

REFERENCE DOCUMENTS:

| | PETROJET | ENPPI | PMC |
|-----------|----------|-------|-----|
| NAME : | | | |
| SIGNATURE | | | |
| DATE | | | |

ITR-EL-0003

| | | |
|---|--|---|
|  Enppi! <small>PETROJET</small> | EGPC CRUDE OIL TANK FARM AGROOD AREA (MODULE 1 & 2) |  |
|---|--|---|

LIGHTING SYSTEM

INSPECTION AND TEST REPORT FOR

POWER OUTLET INSTALLATION CHECK LIST

| | | | | |
|--|------------------------|----------------------------------|-------------------------------|----------|
| INSPECTION REPORT NUMBER RFI_201 252 | INSPECTION DATE & TIME | ITR NUMBER ITR-EL-0004 | DISPLINE ELECTRICAL | SHEET NO |
|--|------------------------|----------------------------------|-------------------------------|----------|



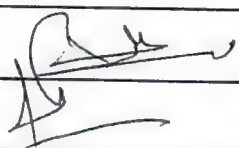
| | | | | |
|-------|--|---------|---------------|-------------|
| TAG : | CIRCUIT No : | PANEL : | AREA/PACKGE : | SYSTEM NO.: |
| TYPE: | <input checked="" type="checkbox"/> WELDING RECEPTACLE <input type="checkbox"/> CONVIENCE OUTLET | | | |

| | |
|----------------|------|
| ITEM / TAG NO. | TYPE |
|----------------|------|

| NO. | INSPECTION | RESULT | | |
|-----|--|--------|--------|------|
| | | ACCEPT | REJECT | N/A. |
| 1 | No damage has been found to devices/switches. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | ✓ | | |
| 4 | Welding (if required) and touch up. | | | ✓ |
| 5 | Anchor bolting / Bolt tightening. | ✓ | | |
| 6 | Mounting height / orientation / direction as per drawings. | ✓ | | |
| 7 | Check cable termination, connection, and cable marker. | ✓ | | |
| 8 | Assembling compartments properly installed. | ✓ | | |
| 9 | Conduit /conduit filled by compound. | ✓ | | |
| 10 | Earthing and bonding properly installed. | ✓ | | |

REMARKS:

REFERENCE DOCUMENTS:

| | PETROJET | ENPPI | PMC |
|-----------|---|---|---|
| NAME : | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

ITR-EL-0004



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030
:01251-100-031

| | |
|------------|-------------------------------|
| Contractor | CONSORTIUM (ENPPI / PETROJET) |
|------------|-------------------------------|

Document No: ITR-QC-0001
Revision No. : 00

REQUEST FOR INSPECTION

ACTIVITY: LIGHTING FIXTURES INSTALLATION


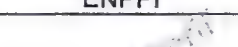
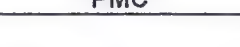
NOTIFICATION NO. : PTJ-ELE-RFI- 258 DISCIPLINE : ELE

DATE : 9/7/2021

| NO. | DESCRIPTION | LOCATION | DATE / TIME | INSPECTION | | | REMARKS |
|-----|--------------------------------|-------------|-------------|------------|-------|-----|---------|
| | | | | PETROJET | ENPPI | PMC | |
| | LIGHTING FIXTURES INSTALLATION | AGROOD#01 | 7-Sep-21 | | | | |
| ✓ | L9-030-LPDP-SF | 20 FIXTURES | | | | | |
| ✓ | L10-030-LPDP-SF | 26 FIXTURES | | | | | |
| ✓ | L11-030-LPDP-SF | 15 FIXTURES | | | | | |
| ✓ | L12-030-LPDP-SF | 19 FIXTURES | 19 Fix | | | | |
| ✓ | L13-030-LPDP-SF | 23 FIXTURES | 23 Fix | | | | |

NOTE:

Inspection result : **A** - Approved **B** - Reject **C** - Approved with Comment

| | PETROJET | ENPPI | PMC |
|-----------|---|--|---|
| NAME : | | | |
| SIGNATURE |  |  |  |
| DATE | 9 July 2021 | | |

ITR-QC-0001



EGPC CRUDE OIL TANK FARM
AGROOD AREA (MODULE 1 & 2)



LIGHTING SYSTEM

INSPECTION AND TEST REPORT FOR

LIGHTING FIXTURE INSTALLATION CHECK LIST

INSPECTION REPORT NUMBER

RFI- 258

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0003

DISCIPLINE

ELECTRICAL

SHEET NO

TAG/ CIRCUIT No.:

PANEL:

AREA/PACKGE:

SYSTEM NO.:

LAMP TYPE: ☐ FLOURESCENT

☐ HP SODIUM

☒ LED

FIXTURE TYPE: ☐ GROUND STANCHION

☐ PLATFORM STANCHION

☐ BRACKET TYPE

☐ CEILING MOUNTED

☐ STREET LIGHTING

☐ FLOODLIGHT TOWER

☒ FENCE LIGHTING

☐ GUARD LIGHTING

ITEM / TAG NO.

TYPE

| NO. | INSPECTION | RESULT | | |
|-----|---|--------|--------------|------|
| | | ACCEPT | REJECT | N/A. |
| 1 | No damage has been found to fixtures/junction box. | ✓ | | |
| 2 | Correct type / size / identification as per drawings. | ✓ | | |
| 3 | Identification / name plate attached correctly. | | ✓ | |
| 4 | Lighting pole and support as per drawings. | ✓ | | |
| 5 | Welding (if required) and touch up. | | ✓ | ✓ |
| 6 | Anchor bolting / Bolt tightening. | ✓ | | |
| 7 | Mounting height / orientation / direction / vertical alignment as per drawings. | ✓ | | |
| 8 | Check cable termination, connection, and cable marker. | ✓ | | |
| 9 | Assembling compartments properly installed. | ✓ | | |
| 10 | Conduit /conduit filled by compound. | | | ✓ |
| 11 | Earthing and bonding properly installed. | ✓ | | |
| 12 | Lamp test | ✓ | | |

REMARKS:

REFERENCE DOCUMENTS:

| | PETROJET | ENPPI | PMC |
|-----------|------------|-------|-----|
| NAME : | | | |
| SIGNATURE | | | |
| DATE | 26/02/2021 | | |

ITR-EL-0003



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

12.08- FAT Reports & Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

12.09- SAT Reports & Certificates

Indoor and Outdoor Lighting Lux Test Certificate of Completion and Acceptance

| | |
|----------------------------|---|
| Client | Egyptian General Petroleum Corporation (EGPC) |
| Project No. | 1251-100 |
| Project Description | Crude Oil Tank Farm Project |
| Location | Agrood Area 30 (Module-01) |
| Systems | <ul style="list-style-type: none"> • (030-EL-007) Substation Building Lighting and Small Power System • (030-EL-014) Plant Area Lighting and Small Power System |
| Completion Date | 27 of October 2021 |
| Attachments | • Lux Test Measurements Values. |

Remarks

- This is to certify that the systems described in this certificate of completion has been lux tested using a calibrated lux meter after final installation and signing of the mechanical completion and RFSU for all lighting systems in accordance with the requirements of the scope of work.
- Lux test has been witnessed by client representatives and accepted as complete in all aspects on the data marked on the certificate of completion and acceptance.
- The test has been completed to the client satisfaction with no comments raised.

| Performed by PETROJET | Supervised by ENPPI | Approved by PPC |
|----------------------------------|--------------------------------|------------------------------|
| Name: <i>Sobhy Seleem</i> | Name: | Name: <i>Mohamed Ibrahim</i> |
| Title: <i>ESI Qc Engineer</i> | Title: | Title: <i>Ele. manager.</i> |
| Signature: <i>Sobhy</i> | Signature: <i>Islam Sherif</i> | Signature: <i>AM</i> |
| Date: <i>28-10-2021</i> | Date: | Date: <i>28-10-2021</i> |

Lux Test Reading for Outdoor and Indoor Lighting for Agrood Area 30 (Module-01)

| Location | API RP 540 Value (Lux) | Actual Tested Value (Lux) |
|------------------------|------------------------|---------------------------|
| Indoor (SWG Room) | 50 | 425 |
| Indoor (Control Room) | 50 | 575 |
| Indoor (Office Room) | 50 | 542 |
| Indoor (Cellar Room) | 50 | 67 |
| Indoor (Telecom. Room) | 50 | 570 |
| Indoor (Security Room) | 50 | 685 |
| Indoor (Battery Room) | 50 | 375 |
| Outdoor (Tank 01 Dike) | 5 | 9 |
| Outdoor (Tank 02 Dike) | 5 | 11 |
| Outdoor (Tank 03 Dike) | 5 | 10 |
| Outdoor (Tank 04 Dike) | 5 | 10 |
| Fire Pumps Area | 50 | 75 |
| Shipping Pumps Area | 50 | 55 |
| Northern Street | 10 | 30 |
| Southern Street | 10 | 30 |
| Eastern Street | 10 | 35 |
| Western Street | 10 | 35 |
| | | |
| | | |
| | | |
| | | |

Remarks:



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

12.10- Electrical Pre-Commissioning Check Lists

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E1-030-EPM4-LTG

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|------------|
| NAME | | | |
| SIGNATURE | <i>Sobh</i> | <i>Islam Sherif</i> | <i>ERH</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E1-030-EPM4-LTG

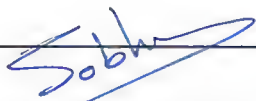
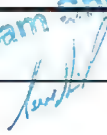

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | ® Islam Sherif | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E1-030-EPM3-LTG

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|----------------|--------------------|
| NAME | | | |
| SIGNATURE | <i>Soh</i> | ® Islam Sherif | <i>[Signature]</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E1-030-EPM3-LTG

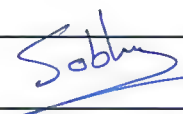
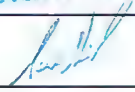
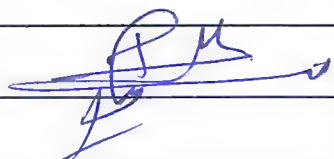
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | ® Islam Sherif | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |
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| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E1-030-EPM1-LTG

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|-----------|
| NAME | | ® Islam Sherif | |
| SIGNATURE | <i>Sobhan</i> | <i>Islam Sherif</i> | <i>PR</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E1-030-EPM1-LTG




AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | — | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E1-030-EPM2-LTG

AREA : 30

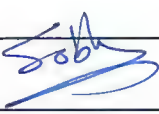
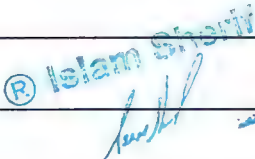
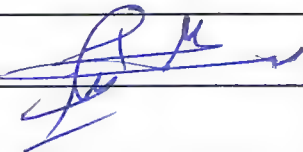
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed.

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E1-030-EPM2-LTG

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | — | |
| 14 | Inspect cable laid in trenches, segregation and protection. | — | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------|----------|
| NAME | | ® Islam | |
| SIGNATURE | S-b | | Ru |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E2-030-EPM3-LTG

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|--------------|----------|
| NAME | | Islam Sherif | |
| SIGNATURE | Sobhan | | |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E2-030-EPM3-LTG

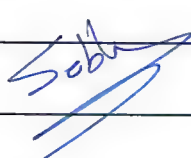

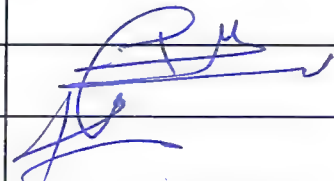
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST

MEDIUM VOLTAGE CABLES

Low

EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E2-030-EPM2-LTG

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|-----------|
| NAME | | | |
| SIGNATURE | <i>Sobhan</i> | <i>Islam Sherif</i> | <i>PA</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E2-030-EPM2-LTG


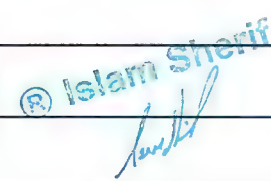

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
| | | |
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| | | |
| | | |
| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E2-030-EPM1-LTG

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed.

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|-----------|
| NAME | | | |
| SIGNATURE | <i>Sobhan</i> | <i>Islam Sherif</i> | <i>PK</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E2-030-EPM1-LTG

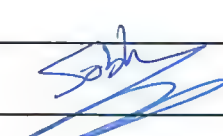
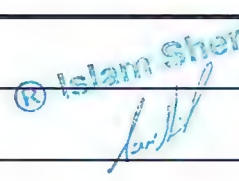
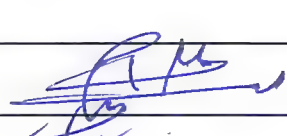
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E1-030-LPDP-LTG

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|-----------|
| NAME | | | |
| SIGNATURE | <i>Sabir</i> | <i>Islam Sherif</i> | <i>PK</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E1-030-LPDP-LTG

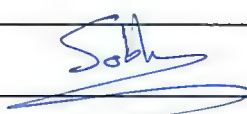
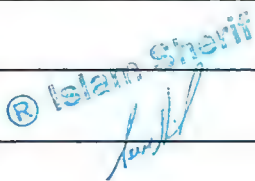
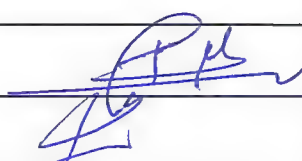
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-30A

PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E4-030-LPDP-LTG

AREA : 30



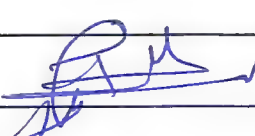
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.




| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

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|--|-----------------------------------|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Pijpet, Agrood Area 30 (Module-01) | |
| PROJECT NUMBER : 1251-100 | DISCIPLINE : Electrical |
| SYSTEM NAME : Plant Area lighting and small Power System | SYSTEM ID : 030-EL-014 |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | SUB-SYSTEM ID : 030-EL-014 |
| ITEM TAG No. : E4-030-LPDP-LTG | AREA : 30 |
| REF. DWGs/DOCs : | |

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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REMARKS AND OBSERVATIONS:

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | |  | |
| SIGNATURE |  | |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |
| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E3-030-LPDP-LTG

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|--------------------|
| NAME | | | |
| SIGNATURE | <i>Sobh</i> | <i>Islam Sherif</i> | <i>[Signature]</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Pijet, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E3-030-LPDP-LTG

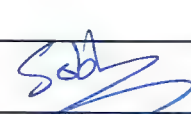
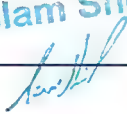
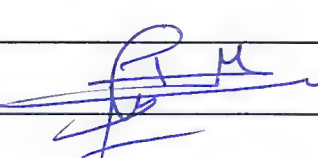
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | — | |
| 14 | Inspect cable laid in trenches, segregation and protection. | — | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | — | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | ® Islam Sherni | |
| SIGNATURE |  |  |  |
| DATE | | | |

**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E2-030-LPDP-LTG

AREA : 30

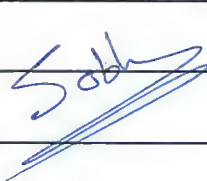
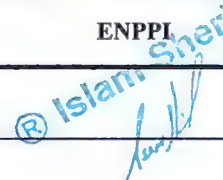
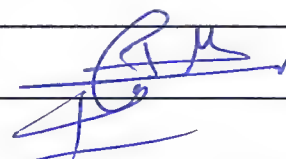
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E2-030-LPDP-LTG



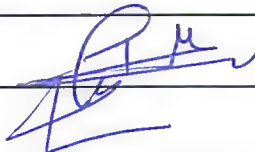
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E2-030-EPM4-LTG

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|----------------|----------|
| NAME | | | |
| SIGNATURE | Sobhy | ® Islam Sharif | |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E2-030-EPM4-LTG


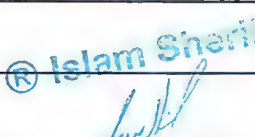

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | — | |
| 14 | Inspect cable laid in trenches, segregation and protection. | — | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | — | |
| 16 | Equipment test report and inspection certificate to be-checked. | — | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L1-030-EPM2-FT

AREA : 30

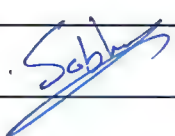
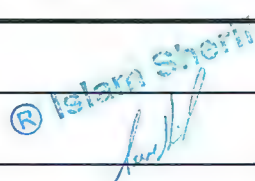
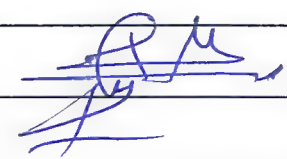
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|--|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L1-030-EPM2-FT




AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST

MEDIUM VOLTAGE CABLES

Low

EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L1-030-EPM1-FT

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|----------------|--------------------|
| NAME | | | |
| SIGNATURE | <i>Sobhy</i> | ® Islam Sherif | <i>[Signature]</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L1-030-EPM1-FT

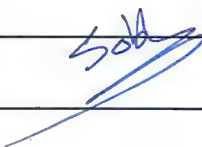
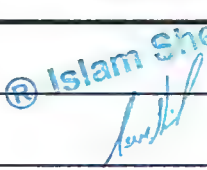
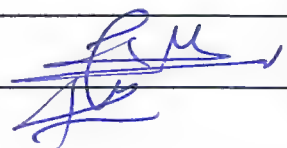
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | @ Islam Sherif | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E6-030-LPDP-LTG

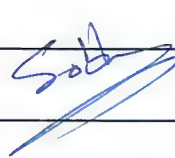
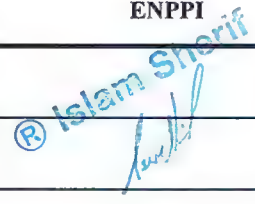

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E6-030-LPDP-LTG

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
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REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|--------------|----------|
| NAME | | Islam Sherif | |
| SIGNATURE | Sob | | |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |
| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Pijet, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E5-030-LPDP-LTG

AREA : 30

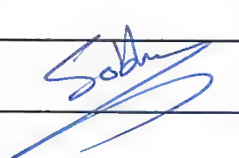

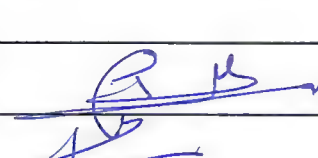
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | ® Islam Sherif | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : E5-030-LPDP-LTG

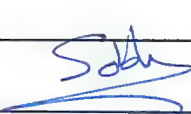
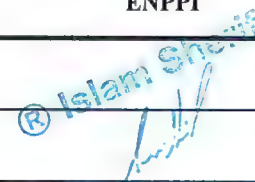
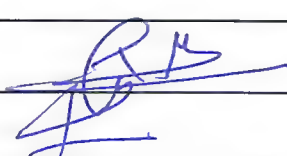
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L2-030-EPM3-FT

AREA : 30

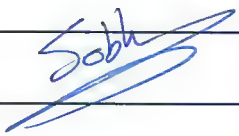

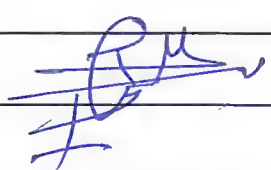
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Prieject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L2-030-EPM3-FT

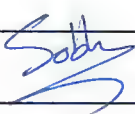
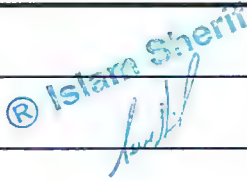
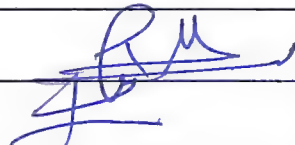
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L1-030-LPDP-SF

AREA : 30

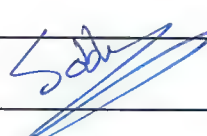
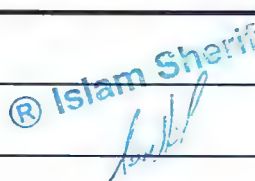
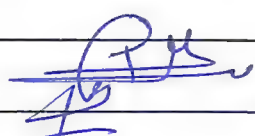
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L1-030-LPDP-SF


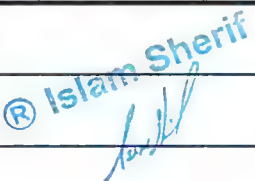
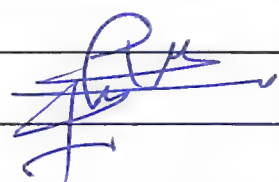
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L1-030-EPM3-FT

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|--------------|----------|
| NAME | | Islam Sherif | |
| SIGNATURE | Sobhy | | |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Pijet, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L1-030-EPM3-FT




AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | — | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | NIA | |
| 18 | Calibration test certificate of testing equipment to be checked. | NA | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | © Islam Sherif | |
| SIGNATURE |  |  |  |
| DATE | | | |

**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L1-030-EPM4-FT

AREA : 30

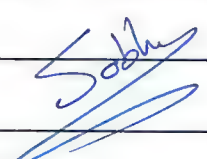
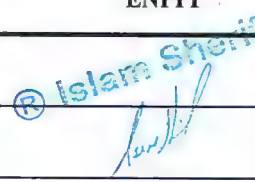
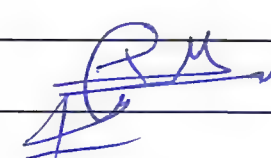
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L1-030-EPM4-FT


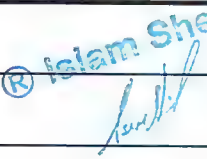
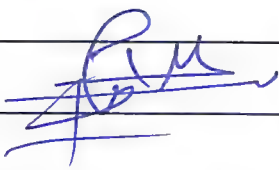
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
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| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |



PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A

INSULATION TEST
EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
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| | | |
| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L2-030-LPDP-SF

AREA : 30

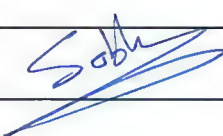
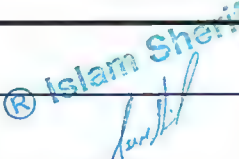
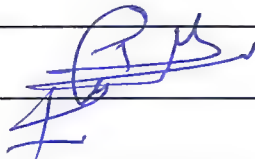
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L2-030-LPDP-SF

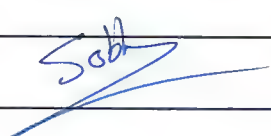

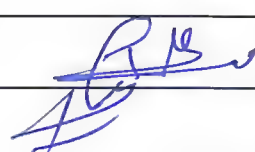
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L2-030-EPM4-FT

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|-----------|
| NAME | | | |
| SIGNATURE | <i>Sobh</i> | <i>Islam Sherif</i> | <i>RK</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L2-030-EPM4-FT


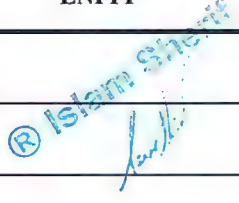
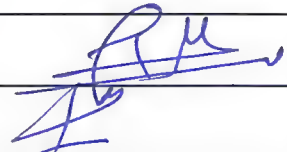
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L2-030-EPM2-FT

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|-----------------------|------------|
| NAME | | | |
| SIGNATURE | <i>Sabbir</i> | <i>® Islam Sherif</i> | <i>RAH</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L2-030-EPM2-FT

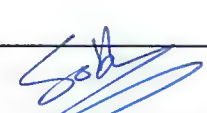

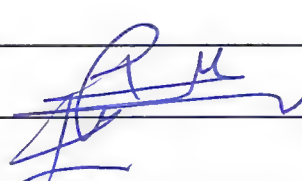
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST

MEDIUM VOLTAGE CABLES

Low

EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L3-030-EPM3-FT

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|-----------|
| NAME | | | |
| SIGNATURE | <i>Sob</i> | <i>Islam Sherif</i> | <i>PH</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L3-030-EPM3-FT

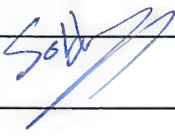
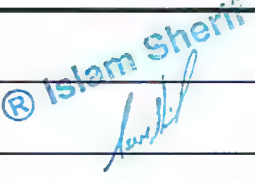
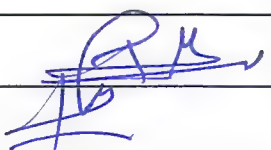
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L3-030-EPM2-FT

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS:

All tags must be installed & corrected

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|------------|
| NAME | | | |
| SIGNATURE | <i>Sobhan</i> | <i>Islam Sherif</i> | <i>Amr</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L3-030-EPM2-FT

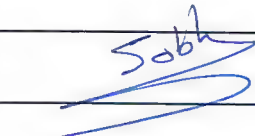
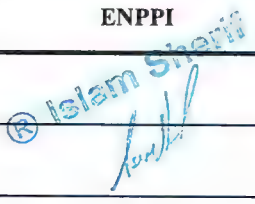
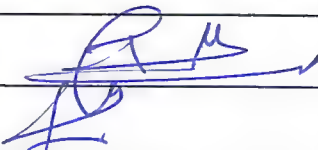
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | NA | |
| | | | |
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REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L3-030-EPM1-FT

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|-----------|
| NAME | | | |
| SIGNATURE | <i>Sobk</i> | <i>Islam Sherif</i> | <i>PR</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L3-030-EPM1-FT

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|----------------|----------|
| NAME | | ® Islam Sherif | |
| SIGNATURE | Sobh | | |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L8-030-LPDP-SF

AREA : 30

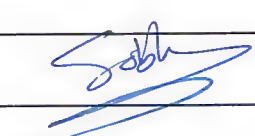
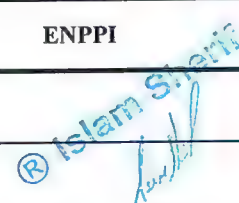
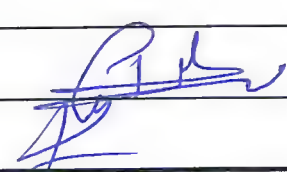
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|--|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L8-030-LPDP-SF

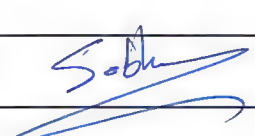
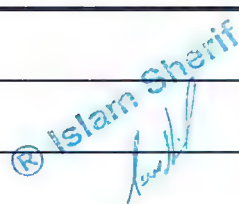
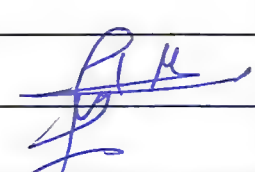
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
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| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-30A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L7-030-LPDP-SF

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|-----------|
| NAME | | | |
| SIGNATURE | <i>Soh</i> | <i>Islam Sherif</i> | <i>PM</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L7-030-LPDP-SF

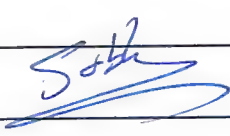

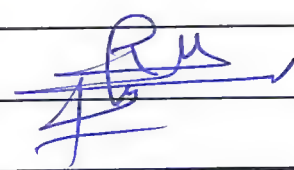
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|--|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L6-030-LPDP-SF

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|-----------|
| NAME | | | |
| SIGNATURE | <i>Sobh</i> | <i>Islam Sherif</i> | <i>AK</i> |
| DATE | | | |

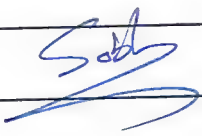
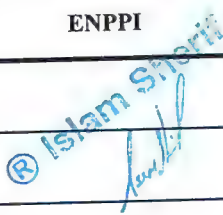
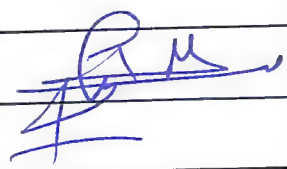
PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

| | |
|---|-----------------------------------|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01) | |
| PROJECT NUMBER : 1251-100 | DISCIPLINE : Electrical |
| SYSTEM NAME : Plant Area lighting and small Power System | SYSTEM ID : 030-EL-014 |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | SUB-SYSTEM ID : 030-EL-014 |
| ITEM TAG No. : L6-030-LPDP-SF | AREA : 30 |
| REF. DWGs/DOCs : | |

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | — | |
| 14 | Inspect cable laid in trenches, segregation and protection. | — | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | — | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
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REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L5-030-LPDP-SF

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |



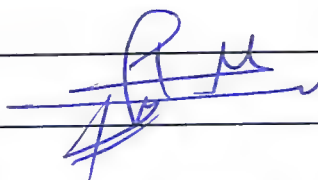
REMARKS AND OBSERVATIONS :

All tags must be corrected & installed.

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|--------------|----------|
| NAME | | Islam Sherif | |
| SIGNATURE | Sobh | | |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

| PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01) | | | |
|---|---|--|---|
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : L5-030-LPDP-SF | | AREA : 30 | |
| REF. DWGs/DOCs : | | | |
| No. | DESCRIPTION | RESULT | PL |
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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| | | | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L4-030-LPDP-SF

AREA : 30

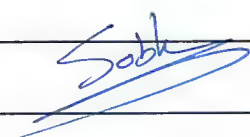
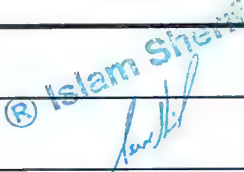
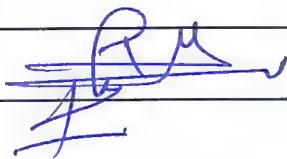
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L4-030-LPDP-SF

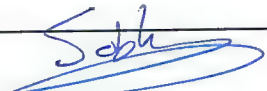
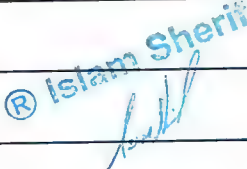
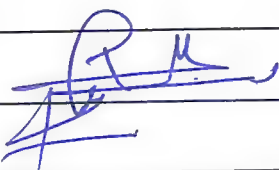
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
| | | |
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| | | |
| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L3-030-LPDP-SF

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|-----------|
| NAME | | | |
| SIGNATURE | <i>Sobh</i> | <i>Islam Sherif</i> | <i>Ru</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L3-030-LPDP-SF

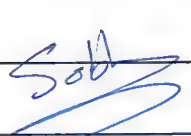
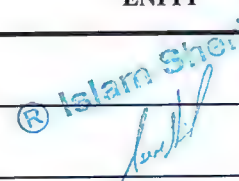
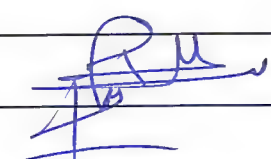
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|----------------------------|-------------------------|--|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
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| | | |
| | | |
| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-30A

PROJECT TITLE : EDPCCrude Oil Tank Farms Pricject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L3-030-EPM4-FT

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|-----------------------|--------------------|
| NAME | | | |
| SIGNATURE | <i>Sobhi</i> | <i>® Islam Sherif</i> | <i>[Signature]</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L3-030-EPM4-FT


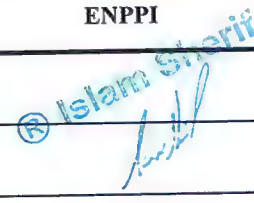
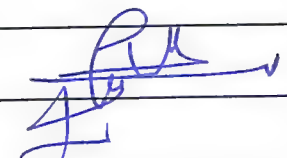
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | A/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P1-030-LPDP-CR-2

AREA : 30

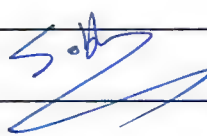
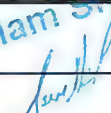
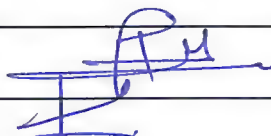
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | ® Islam Sherif | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P1-030-LPDP-CR-2

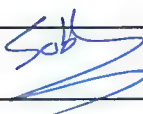
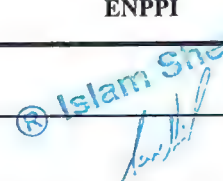

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | Islam Sherif | |
| SIGNATURE |  |  |  |
| DATE | | | |

**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|----------------------------|-------------------------|--|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
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| | | |
| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-30A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P1-030-LPDP-CR-1

AREA : 30

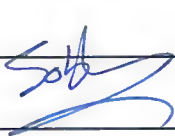
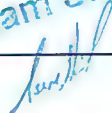
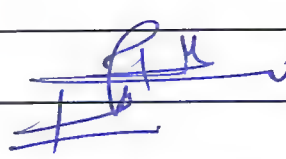
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | ® Islam Sherif | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P1-030-LPDP-CR-1

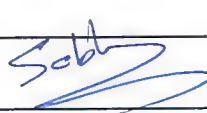
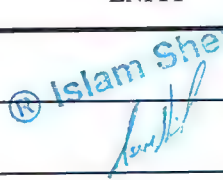
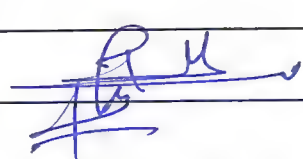
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | Islam Sherif | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |
| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P1-030-EPM4-CR-1

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|---------------------|
| NAME | | ® Islam Sherif | |
| SIGNATURE | <i>Siddiq</i> | <i>Islam Sherif</i> | <i>Islam Sherif</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P1-030-EPM4-CR-1

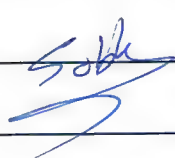
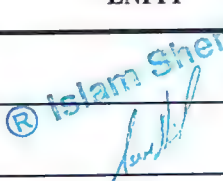

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P1-030-EPM3-CR-1

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|-----------------------|-----------|
| NAME | | | |
| SIGNATURE | <i>Soh</i> | <i>® Islam Sherif</i> | <i>Ru</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P1-030-EPM3-CR-1

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|----------------|----------|
| NAME | | ® Islam Sherif | |
| SIGNATURE | Sob | | AK |
| DATE | | | |

**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P1-030-EPM2-CR-1

AREA : 30

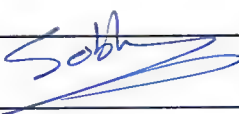
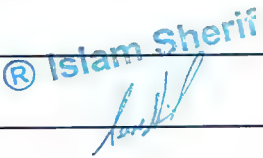
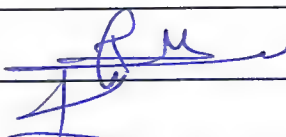
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|--|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P1-030-EPM2-CR-1

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
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| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|----------------|----------|
| NAME | | | |
| SIGNATURE | | ® Islam Sherif | |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P1-030-EPM1-CR-1

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|-----------|
| NAME | | | |
| SIGNATURE | <i>Sobh</i> | <i>Islam Sherif</i> | <i>PK</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Pijet, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P1-030-EPM1-CR-1

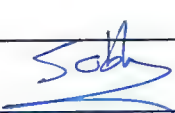
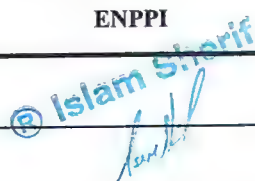
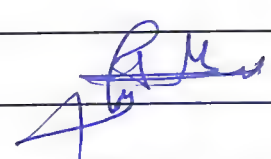
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | A/A | |
| | | | |
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| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|----------------------------|-------------------------|--|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
| | | |
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| | | |
| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-30A

PROJECT TITLE : EDPCCrude Oil Tank Farms Piject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P-030-LPDP-1

AREA : 30

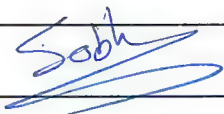
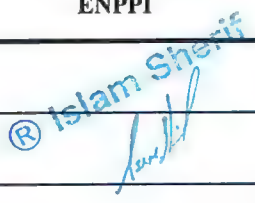
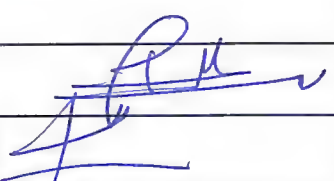
REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P-030-LPDP-1




AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | — | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | Islam Sharif | |
| SIGNATURE |  |  |  |
| DATE | | | |

**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|----------------------------|-------------------------|--|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
| | | |
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| | | |
| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : N6-030-LPDP-LTG

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|---------------------|-----------|
| NAME | | | |
| SIGNATURE | <i>Soleh</i> | <i>Islam Sherni</i> | <i>PK</i> |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : N6-030-LPDP-LTG


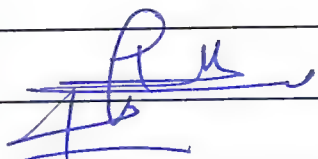
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|----------------|---|
| NAME | | | |
| SIGNATURE |  | ® Islam Sherif |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
| | | |
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| | | |

TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES *Low* EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P2-030-LPDP-CR-2

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

All tages must be corrected & installed

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|-------------------|----------------|--------------------|
| NAME | | ® Islam Sherif | |
| SIGNATURE | <i>Solhu</i> | | <i>[Signature]</i> |
| DATE | | | <i>[Signature]</i> |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P2-030-LPDP-CR-2

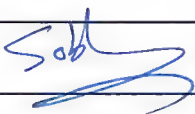
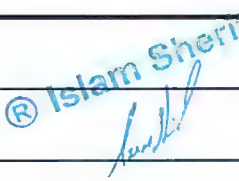

AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|---|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
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TABLE [I]

NOTES:

PRE-COMMISSIONING CHECK LIST

MEDIUM VOLTAGE CABLES

Low

EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P2-030-LPDP-CR-1



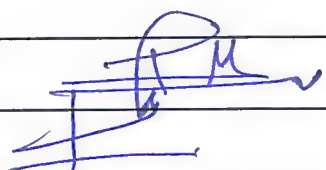
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|--|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|--|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : EDPCCrude Oil Tank Farms Priject, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power System

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power System

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P2-030-LPDP-CR-1


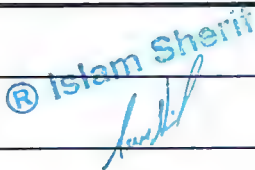
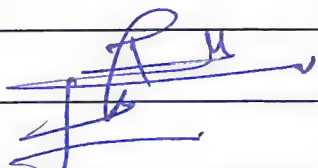
AREA : 30

REF. DWGs/DOCs :

| No. | DESCRIPTION | RESULT | PL |
|-----|---|----------|----------|
| | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be-checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| | | | |
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REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
|-----------|---|--|---|
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

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|---|--|-----------|--------|----------|----------|-------------------|--|
| DATE | | SIGNATURE | | NAME | | COMPANY | |
| | | | | | | CONST. CONTRACTOR | |
| | | | | | | ENPPI | |
| | | | | | | CUSTOMER | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | | | |
| REMARKS AND OBSERVATIONS: All tags must be corrected & installed | | | | | | | |
| No. | DESCRIPTION | | RESULT | OK/NA/PL | ITEM No. | | |
| 1 | Construction punch list to be checked. | | ✓ | | | | |
| 2 | Check cables are correctly fixed to trays and supports. | | ✓ | | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | ✓ | | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | ✓ | | | | |
| 5 | Check identification tags of all conductors and wires. | | ✓ | | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | ✓ | | | | |
| 7 | Inspect cables for jacket damage. | | ✓ | | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | ✓ | | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | ✓ | | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | ✓ | | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | ✓ | | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) PROJECT NUMBER : 1251-100 DISCIPLINE : Electrical SYSTEM NAME : Plant Area lighting and small Power System SUB-SYSTEM NAME : Plant Area lighting and small Power System SYSTEM ID : 030-EL-014 SUB-SYSTEM ID : 030-EL-014 AREA : 30 REF. DWGS/DOCS : | | | | | | | |
| PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A | | | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P1-030-WR-JB | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | — | |
| 14 | Inspect cable laid in trenches, segregation and protection. | — | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | — | |
| 16 | Equipment test report and inspection certificate to be checked. | — | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | Islam Sherif | |
| SIGNATURE | | | |
| DATE | | | |




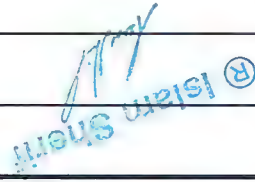
PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A

INSULATION TEST
EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
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TABLE II

NOTES:

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|--|--|--|--------|---|----------|-------------------|--|
| DATE | | SIGNATURE | | NAME | | COMPANY | |
| | |  | |  | | CUSTOMER | |
| | | | | | | ENPPI | |
| | | | | | | CONST. CONTRACTOR | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | | | |
| REMARKS AND OBSERVATIONS: All tags must be corrected & installed | | | | | | | |
| No. | DESCRIPTION | | RESULT | OK/NA/PL | ITEM No. | | |
| 1 | Construction punch list to be checked. | | ✓ | | | | |
| 2 | Check cables are correctly fixed to trays and supports. | | ✓ | | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | ✓ | | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | ✓ | | | | |
| 5 | Check identification tags of all conductors and wires. | | ✓ | | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | ✓ | | | | |
| 7 | Inspect cables for jacket damage. | | ✓ | | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | ✓ | | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | ✓ | | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | ✓ | | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | ✓ | | | | |
| PROJECT NUMBER : 1251-100 PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) DISCIPLINE : Electrical SYSTEM NAME : Plant Area lighting and small Power SUB-SYSTEM NAME : System SYSTEM ID : 030-EL-014 SUB-SYSTEM ID : 030-EL-014 AREA : 30 ITEM TAG No. : P1-030-WR-2 | | | | | | | |
| PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A | | | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|---|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P1-030-WR-2 | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



| | | |
|------------------------------|------------------|---|
| PRE-COMMISSIONING CHECK LIST | | |
| EL-31 A | | |
| MEDIUM VOLTAGE CABLES | | |
| INSULATION TEST | | |
| EL-31 A | | |
| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| TABLE (I) | | |
| NOTES: | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|---|--|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-30A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P1-030-WR-1 | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |
| REMARKS AND OBSERVATIONS: | | | |
| All Tags must be corrected & installed | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|---|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P1-030-WR-1 | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | | |
|--|-------|-----|
| D.C TEST VOLTAGE | | |
| MINIMUM INSULATION RESISTANCE (M.OHMS). | | |
| 3.3KV | 2500V | 200 |
| 6.6KV & Above | 5000V | 200 |
| | | |
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TABLE (I)

NOTES:

| PRE-COMMISSIONING CHECK LIST | | MEDIUM VOLTAGE CABLES | | EL-30A | |
|--|--|----------------------------|----------|----------|----|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | | | |
| PROJECT NUMBER : 1251-100 | | | | | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | | | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | | | |
| ITEM TAG No. : P1-030-LPDP-CR-JB | | AREA : 30 | | | |
| REF. DWGS/DOCS : | | | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. | PL |
| 1 | Construction punch list to be checked. | ✓ | | | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | | | |
| 5 | Check identification tags of all conductors and wires. | ✓ | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | | | |
| 7 | Inspect cables for jacket damage. | ✓ | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | | | |
| REMARKS AND OBSERVATIONS : | | | | | |
| All tags must be corrected & installed | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER | | |
| NAME | | | | | |
| SIGNATURE | | | | | |
| DATE | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P1-030-LPDP-CR-JB | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|----------------------------|-------------------------|--|
| 3.3KV | 2500V | 200 |
| 6.6KV & Above | 5000V | 200 |
| | | |
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| | | |

TABLE II

NOTES:

PAGE 1 OF 1

| No. | DESCRIPTION | OK/NA/PL | RESULT |
|-----|--|----------|--------|
| | | OK/NA/PL | PL |
| 1 | Construction punch list to be checked. | | ✓ |
| 2 | Check cables are correctly fixed to trays and supports. | | ✓ |
| 3 | Check cables through walls or ceilings are correctly sealed. | | ✓ |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | ✓ |
| 5 | Check identification tags of all conductors and wires. | | ✓ |
| 6 | Check connection, termination and joints of cables are correctly executed. | | ✓ |
| 7 | Inspect cables for jacket damage. | | ✓ |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | ✓ |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | ✓ |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | ✓ |
| 11 | Tie wraps to be used for cable and wires fixation. | | ✓ |

All tags must be corrected & installed

| | | | |
|-----------|-------------------|-------|----------|
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P1-030-LPDP-CR-3 | | AREA : 30 | |
| REF. DWG's/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | ✓ | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



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|-------------------------------------|-------------------------|--|
| PRE-COMMISSIONING CHECK LIST | | |
| MEDIUM VOLTAGE CABLES | | |
| EL-31 A | | |
| INSULATION TEST | | |
| EL-31 A | | |
| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| TABLE (I) | | |
| NOTES: | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|---|--|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-3DA | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P3-030-LPDP-CR-4 | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |
| REMARKS AND OBSERVATIONS : | | | |
| All tags must be corrected & installed. | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P3-030-LPDP-CR-4 | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



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| PRE-COMMISSIONING CHECK LIST | | |
| MEDIUM VOLTAGE CABLES | | |
| EL-31 A | | |
| INSULATION TEST | | |
| EL-31 A | | |
| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
| 3.3KV | 2500V | 200 |
| 6.6KV & Above | 5000V | 200 |
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| | | |
| TABLE II | | |
| NOTES: | | |

| PRE-COMMISSIONING CHECK LIST | | MEDIUM VOLTAGE CABLES | | EL-31A | |
|---|--|----------------------------|----------|----------|----------|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | | | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | | | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power | | SUB-SYSTEM ID : 030-EL-014 | | | |
| ITEM TAG No. : P3-030-LPDP-CR-3 | | AREA : 30 | | | |
| REF. DWGS/DOCS : | | | | | |
| No. | DESCRIPTION | | RESULT | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | | ✓ | | |
| 2 | Check cables are correctly fixed to trays and supports. | | ✓ | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | ✓ | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | ✓ | | |
| 5 | Check identification tags of all conductors and wires. | | ✓ | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | ✓ | | |
| 7 | Inspect cables for jacket damage. | | ✓ | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | ✓ | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | ✓ | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | ✓ | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | ✓ | | |
| REMARKS AND OBSERVATIONS : | | | | | |
| All tags must be corrected & installed. | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER | | |
| NAME | | | | | |
| SIGNATURE | | | | | |
| DATE | | | | | |

PAGE 1 OF 1



PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A

INSULATION TEST
EL-31 A

| CABLE VOLTAGE LEVEL | | |
|---|-------|-----|
| D.C TEST VOLTAGE | | |
| MINIMUM INSULATION RESISTANCE (M.OHMS). | | |
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
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TABLE II

NOTES:

| PRE-COMMISSIONING CHECK LIST | | MEDIUM VOLTAGE CABLES | | EL-3DA | |
|--|--|----------------------------|----------|----------|----------|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | | | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | | | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | | | |
| ITEM TAG No. : P3-030-LPDP-CR-2 | | AREA : 30 | | | |
| REF. DWGS/DOCS : | | | | | |
| No. | DESCRIPTION | | RESULT | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | | ✓ | | |
| 2 | Check cables are correctly fixed to trays and supports. | | ✓ | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | ✓ | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | ✓ | | |
| 5 | Check identification tags of all conductors and wires. | | ✓ | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | ✓ | | |
| 7 | Inspect cables for jacket damage. | | ✓ | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | ✓ | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | ✓ | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | ✓ | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | ✓ | | |
| REMARKS AND OBSERVATIONS : | | | | | |
| All tags must be corrected & installed. | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER | | |
| NAME | | | | | |
| SIGNATURE | | | | | |
| DATE | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|---|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P3-030-LPDP-CR-2 | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



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| PRE-COMMISSIONING CHECK LIST | | |
| MEDIUM VOLTAGE CABLES | | |
| EL-31 A | | |
| INSULATION TEST | | |
| EL-31 A | | |
| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| TABLE [I] | | |
| NOTES: | | |

| | | | | | | | |
|---|--|-----------|--------|----------|----------|-------------------|--|
| DATE | | SIGNATURE | | NAME | | COMPANY | |
| | | | | | | CONST. CONTRACTOR | |
| | | | | | | ENPPI | |
| | | | | | | CUSTOMER | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | | | |
| REMARKS AND OBSERVATIONS: All tags must be covered & installed | | | | | | | |
| No. | DESCRIPTION | | RESULT | OK/NA/PL | ITEM No. | | |
| 1 | Construction punch list to be checked. | | ✓ | | | | |
| 2 | Check cables are correctly fixed to trays and supports. | | ✓ | | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | ✓ | | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | ✓ | | | | |
| 5 | Check identification tags of all conductors and wires. | | ✓ | | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | ✓ | | | | |
| 7 | Inspect cables for jacket damage. | | ✓ | | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | ✓ | | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | ✓ | | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | ✓ | | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | ✓ | | | | |
| PROJECT NUMBER : 1251-100 PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) DISCIPLINE : Electrical SYSTEM NAME : Plant Area lighting and small Power SUB-SYSTEM NAME : System SYSTEM ID : 030-EL-014 SUB-SYSTEM ID : 030-EL-014 AREA : 30 ITEM TAG No. : P3-030-LPDP-CR-1 REF. DWGS/DOCs : | | | | | | | |
| PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-3DA | | | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P3-030-LPDP-CR-1 | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

**INSULATION TEST
EL-31 A**


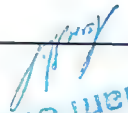
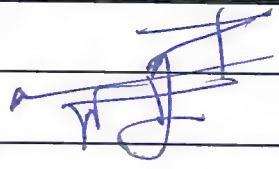
| CABLE VOLTAGE LEVEL | | |
|---|-------|-----|
| D.C TEST VOLTAGE | | |
| MINIMUM INSULATION RESISTANCE (M.OHMS). | | |
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
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TABLE II

NOTES:

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|--|--|----------------------------|----------|----------|----------|
| PRE-COMMISSIONING CHECK LIST | | MEDIUM VOLTAGE CABLES | | EL-31A | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | | | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | | | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power | | SUB-SYSTEM ID : 030-EL-014 | | | |
| ITEM TAG No. : P2-030-WR-2 | | AREA | | : 30 | |
| REF. DWGS/DOCS : | | | | | |
| No. | DESCRIPTION | | RESULT | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | | ✓ | | |
| 2 | Check cables are correctly fixed to trays and supports. | | ✓ | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | ✓ | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | ✓ | | |
| 5 | Check identification tags of all conductors and wires. | | ✓ | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | ✓ | | |
| 7 | Inspect cables for jacket damage. | | ✓ | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | ✓ | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | ✓ | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | ✓ | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | ✓ | | |
| REMARKS AND OBSERVATIONS : | | | | | |
| All tags must be corrected & installed. | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER | | |
| NAME | | | | | |
| SIGNATURE | | | | | |
| DATE | | | | | |

10000-Z-000-EK7-TMP-0017 (03/14)

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|---|---|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P2-030-WR-2 | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |



PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A

INSULATION TEST
EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
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TABLE II

NOTES:

PRE-COMMISSIONING CHECK LIST

MEDIUM VOLTAGE CABLES

EL-37A

PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power

SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power

SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : P2-030-WR-1

AREA : 30

REF. DWGS/DOCS :

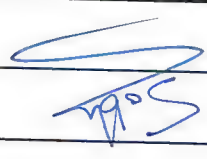
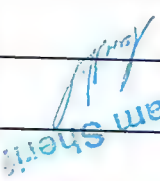
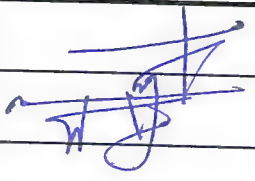
No. DESCRIPTION

| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. |
|-----|--|--------|----------|----------|
| | | PL | | |
| 1 | Construction punch list to be checked. | ✓ | | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | | |
| 5 | Check identification tags of all conductors and wires. | ✓ | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | | |
| 7 | Inspect cables for jacket damage. | ✓ | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | | |

REMARKS AND OBSERVATIONS :

All tags must be corrected & installed.

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| | | | |
|-----------|---|---|---|
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P2-030-WR-1 | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

**INSULATION TEST
EL-31 A**

| CABLE VOLTAGE LEVEL | | |
|---|-------|-----|
| D.C TEST VOLTAGE | | |
| MINIMUM INSULATION RESISTANCE (M.OHMS). | | |
| 3.3KV | 2500V | 200 |
| 6.6KV & Above | 5000V | 200 |
| | | |
| | | |
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| | | |




TABLE (I)

NOTES:

| No. | DESCRIPTION | OK/NA/PL | ITEM No. |
|-----|-------------|----------|----------|
| | | RESULT | PL |

REMARKS AND OBSERVATIONS:

All tags must be corrected & installed

| | | | |
|-----------|---|---|---|
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : P2-030-LPDP-CR-JB | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL |
| PL | ITEM No. | | |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

**INSULATION TEST
EL-31 A**

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE II

NOTES:

| PRE-COMMISSIONING CHECK LIST | | MEDIUM VOLTAGE CABLES | | EL-3DA | |
|--|--|----------------------------|----------|----------|--|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | | | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | | | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | | | |
| ITEM TAG No. : L2-030-EPM1-FT | | AREA : 30 | | | |
| REF. DWGS/DOCS : | | | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. | |
| 1 | Construction punch list to be checked. | | | | |
| 2 | Check cables are correctly fixed to trays and supports. | | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | | | |
| 5 | Check identification tags of all conductors and wires. | | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | | | |
| 7 | Inspect cables for jacket damage. | | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | | | |
| REMARKS AND OBSERVATIONS : | | | | | |
| All tags must be corrected & installed | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER | | |
| NAME | | | | | |
| SIGNATURE | | | | | |
| DATE | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|--|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | | |
| DISCIPLINE : Electrical | | SYSTEM NAME : Plant Area lighting and small Power System | |
| SYSTEM ID : 030-EL-014 | | SUB-SYSTEM NAME : Plant Area lighting and small Power System | |
| SUB-SYSTEM ID : 030-EL-014 | | ITEM TAG No. : L2-030-EPM1-FT | |
| AREA : 30 | | REF. DWGS/DOCS : | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3KV | 2500V | 200 |
| 6.6KV & Above | 5000V | 200 |
| | | |
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| | | |

TABLE III

NOTES:

PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-3DA

PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Electrical

SYSTEM NAME : Plant Area lighting and small Power
SYSTEM ID : 030-EL-014

SUB-SYSTEM NAME : Plant Area lighting and small Power
SUB-SYSTEM ID : 030-EL-014

ITEM TAG No. : L13-030-LPDP-SF

AREA : 30

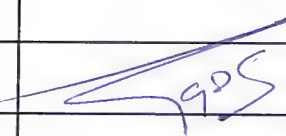
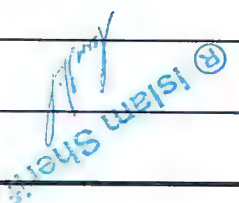

REF. DWGS/DOCS :

| No. | DESCRIPTION | RESULT | ITEM No. |
|-----|--|--------|----------|
| | | PL | |
| 1 | Construction punch list to be checked. | / | |
| 2 | Check cables are correctly fixed to trays and supports. | / | |
| 3 | Check cables through walls or ceilings are correctly sealed. | / | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | / | |
| 5 | Check identification tags of all conductors and wires. | / | |
| 6 | Check connection, termination and joints of cables are correctly executed. | / | |
| 7 | Inspect cables for jacket damage. | / | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | / | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | / | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | / | |
| 11 | Tie wraps to be used for cable and wires fixation. | / | |

REMARKS AND OBSERVATIONS:

All tags must be checked & installed.

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

| | | | |
|-----------|--|---|---|
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : L13-030-LPDP-SF | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | — | |
| 14 | Inspect cable laid in trenches, segregation and protection. | — | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | — | |
| 16 | Equipment test report and inspection certificate to be checked. | — | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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| | | |
| | | |

TABLE (I)

NOTES:

| PRE-COMMISSIONING CHECK LIST | | MEDIUM VOLTAGE CABLES | | EL-3DA | |
|--|--|--|----------|----------|--|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agfood Area 30 (Module-01) | | | | | |
| PROJECT NUMBER : 1251-100 | | | | | |
| DISCIPLINE : Electrical | | SYSTEM NAME : Plant Area lighting and small Power System | | | |
| SYSTEM ID : 030-EL-014 | | SUB-SYSTEM NAME : Plant Area lighting and small Power System | | | |
| SUB-SYSTEM ID : 030-EL-014 | | ITEM TAG No. : L12-030-LPDP-SF | | | |
| AREA : 30 | | REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. | |
| 1 | Construction punch list to be checked. | ✓ | | | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | | | |
| 5 | Check identification tags of all conductors and wires. | ✓ | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | | | |
| 7 | Inspect cables for jacket damage. | ✓ | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | | | |
| REMARKS AND OBSERVATIONS : | | | | | |
| All tags must be corrected & installed | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER | | |
| NAME | | | | | |
| SIGNATURE | | | | | |
| DATE | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|-----------------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : L12-030-LPDP-SF | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | — | |
| 14 | Inspect cable laid in trenches, segregation and protection. | — | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | — | |
| 16 | Equipment test report and inspection certificate to be checked. | — | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | NA | |
| 18 | Calibration test certificate of testing equipment to be checked. | NA | |
| REMARKS AND OBSERVATIONS : | | | |
| | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A

INSULATION TEST
EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE II

NOTES:

| | | | | | | | |
|---|--|-----------|----------|----------|----|-------------------|--|
| DATE | | SIGNATURE | | NAME | | COMPANY | |
| | | | | | | CONST. CONTRACTOR | |
| | | | | | | ENPPI | |
| | | | | | | CUSTOMER | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | | | |
| REMARKS AND OBSERVATIONS: <i>All tags must be corrected & installed.</i> | | | | | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | | | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | | | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | | | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | | | | | |
| 7 | Inspect cables for jacket damage. | | | | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | | | | | |
| 5 | Check identification tags of all conductors and wires. | | | | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | | | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | | | | | |
| 2 | Check cables are correctly fixed to trays and supports. | | | | | | |
| 1 | Construction punch list to be checked. | | | | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. | PL | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | | | | | |
| PROJECT NUMBER : 1251-100 | | | | | | | |
| DISCIPLINE : Electrical | | | | | | | |
| SYSTEM NAME : Plant Area lighting and small Power | | | | | | | |
| SUB-SYSTEM NAME : System | | | | | | | |
| ITEM TAG No. : L11-030-LPDP-SF | | | | | | | |
| AREA : 30 | | | | | | | |
| SUB-SYSTEM ID : 030-EL-014 | | | | | | | |
| SYSTEM ID : 030-EL-014 | | | | | | | |
| PRE-COMMISSIONING CHECK LIST | | | | | | | |
| MEDIUM VOLTAGE CABLES | | | | | | | |
| EL-31 A | | | | | | | |

| | | | | | |
|---|---|----------------------|-----------------|------------------|------------------|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | | | |
| PROJECT NUMBER | : 1251-100 | DISCIPLINE | : Electrical | | |
| SYSTEM NAME | : Plant Area lighting and small Power System | SYSTEM ID | : 030-EL-014 | | |
| SUB-SYSTEM NAME | : Plant Area lighting and small Power System | SUB-SYSTEM ID | : 030-EL-014 | | |
| ITEM TAG No. | : L11-030-LPDP-SF | AREA | : 30 | | |
| REF. DWGS/DOCS : | | | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. | |
| 12 | Trench markers to be checked w.r.t approved documents. | — | | | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | — | | | |
| 14 | Inspect cable laid in trenches, segregation and protection. | — | | | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | — | | | |
| 16 | Equipment test report and inspection certificate to be-checked. | — | | | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | — | | | |
| 18 | Calibration test certificate of testing equipment to be checked. | — | | | |
| REMARKS AND OBSERVATIONS : | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER | NAME | SIGNATURE |
| | | | | | |
| DATE | | | | SIGNATURE | |



| | | |
|------------------------------|------------------|---|
| PRE-COMMISSIONING CHECK LIST | | |
| MEDIUM VOLTAGE CABLES | | |
| EL-31 A | | |
| INSULATION TEST | | |
| EL-31 A | | |
| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
| 3.3KV | 2500V | 200 |
| 6.6KV & Above | 5000V | 200 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| TABLE III | | |
| NOTES: | | |

| PRE-COMMISSIONING CHECK LIST | | MEDIUM VOLTAGE CABLES | | EL-31A | |
|---|--|---|----------|--------|--|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | | | |
| PROJECT NUMBER : 1251-100 | | | | | |
| DISCIPLINE : Electrical | | SYSTEM NAME : Plant Area lighting and small Power | | | |
| SYSTEM ID : 030-EL-014 | | SUB-SYSTEM NAME : System | | | |
| SUB-SYSTEM ID : 030-EL-014 | | ITEM TAG No. : L10-030-LPDP-SF | | | |
| AREA : 30 | | REF. DWGS/DOCS : | | | |
| No. DESCRIPTION | | | | | |
| PL | RESULT | OK/NA/PL | | | |
| ITEM No. | | | | | |
| 1 | Construction punch list to be checked. | | | | |
| 2 | Check cables are correctly fixed to trays and supports. | | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | | | |
| 5 | Check identification tags of all conductors and wires. | | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | | | |
| 7 | Inspect cables for jacket damage. | | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | | | |
| REMARKS AND OBSERVATIONS : | | | | | |
| All trays must be corrected & installed. | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER | | |
| NAME | | | | | |
| SIGNATURE | | | | | |
| DATE | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : L10-030-LPDP-SF | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL |
| PL | ITEM No. | | |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | — | |
| 14 | Inspect cable laid in trenches, segregation and protection. | — | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | — | |
| 16 | Equipment test report and inspection certificate to be checked. | — | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | 2/1/18 | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A

INSULATION TEST
EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

TABLE II

NOTES:

| PRE-COMMISSIONING CHECK LIST | | MEDIUM VOLTAGE CABLES | | EL-31A | |
|---|--|----------------------------|----------|----------|----------|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | | | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | | | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | | | |
| ITEM TAG No. : L9-030-LPDP-SF | | AREA : 30 | | | |
| REF. DWGS/DOCS : | | | | | |
| No. | DESCRIPTION | | RESULT | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | | / | | |
| 2 | Check cables are correctly fixed to trays and supports. | | / | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | / | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | / | | |
| 5 | Check identification tags of all conductors and wires. | | / | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | / | | |
| 7 | Inspect cables for jacket damage. | | / | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | / | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | / | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | / | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | / | | |
| REMARKS AND OBSERVATIONS : | | | | | |
| All tags must be corrected & installed. | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER | | |
| NAME | | | | | |
| SIGNATURE | | | | | |
| DATE | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : L9-030-LPDP-SF | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | / | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | / | |
| 14 | Inspect cable laid in trenches, segregation and protection. | / | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | / | |
| 16 | Equipment test report and inspection certificate to be checked. | — | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | ® Isiam Sherif | |
| SIGNATURE | | | |
| DATE | | | |

NOTES:

TABLE II

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| | | |
| 200 | 5000V | 6.6kV & Above |
| 200 | 2500V | 3.3kV |
| MINIMUM INSULATION RESISTANCE (M.OHMS). | D.C TEST VOLTAGE | CABLE VOLTAGE LEVEL |

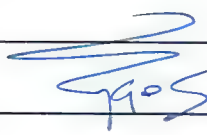
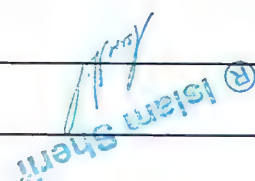
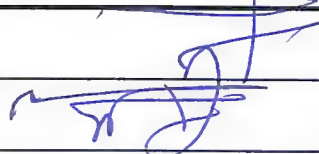
EL-31 A

INSULATION TEST

EL-31 A

PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES



| PRE-COMMISSIONING CHECK LIST | | MEDIUM VOLTAGE CABLES | | EL-31 A | |
|--|--|---|---|----------|----------|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | | | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | | | |
| SUB-SYSTEM NAME : System | | SUB-SYSTEM ID : 030-EL-014 | | | |
| ITEM TAG No. : N5-030-LPDP-LTG | | AREA : 30 | | | |
| REF. DWGS/DOCS : | | | | | |
| No. | DESCRIPTION | | RESULT | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | | ✓ | | |
| 2 | Check cables are correctly fixed to trays and supports. | | ✓ | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | ✓ | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | ✓ | | |
| 5 | Check identification tags of all conductors and wires. | | ✓ | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | ✓ | | |
| 7 | Inspect cables for jacket damage. | | ✓ | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | ✓ | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | ✓ | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | ✓ | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | ✓ | | |
| REMARKS AND OBSERVATIONS : | | | | | |
| All tags must be corrected & installed | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER | | |
| NAME | | | | | |
| SIGNATURE |  |  |  | | |
| DATE | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : N5-030-LPDP-LTG | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | / | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | / | |
| 14 | Inspect cable laid in trenches, segregation and protection. | / | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | / | |
| 16 | Equipment test report and inspection certificate to be checked. | / | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

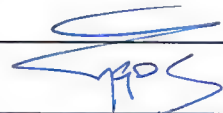
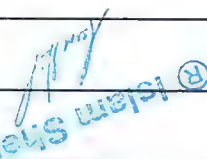
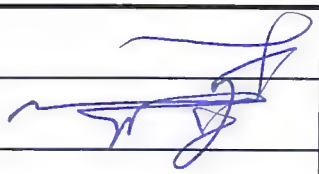
INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

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|--|--|---|----------|----------|--|-------------------|--|
| DATE | | SIGNATURE | | NAME | | COMPANY | |
| | |  | | | | CONST. CONTRACTOR | |
| | |  | | | | ENPPI | |
| | |  | | | | CUSTOMER | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | | | |
| REMARKS AND OBSERVATIONS: All tags must be corrected & installed. | | | | | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | | | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | | | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | | | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | | | | | |
| 7 | Inspect cables for jacket damage. | | | | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | | | | | |
| 5 | Check identification tags of all conductors and wires. | | | | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | | | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | | | | | |
| 2 | Check cables are correctly fixed to trays and supports. | | | | | | |
| 1 | Construction punch list to be checked. | | | | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. | | | |
| REF. DWGS/DOCS : | | | | | | | |
| ITEM TAG No. : N4-030-LPDP-LTG | | AREA : 30 | | | | | |
| SUB-SYSTEM NAME : System | | SUB-SYSTEM ID : 030-EL-014 | | | | | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | | | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | | | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | | | | | |
| PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-3DA | | | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : N4-030-LPDP-LTG | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |

NOTES:

TABLE II

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| | | |
| 200 | 5000V | 6.6kV & Above |
| 200 | 2500V | 3.3kV |
| MINIMUM INSULATION RESISTANCE (M.OHMS). | D.C TEST VOLTAGE | CABLE VOLTAGE LEVEL |

EL-31 A

INSULATION TEST

EL-31 A

PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES



| DATE | | SIGNATURE | | NAME | | COMPANY | |
|---|--|-----------|----------|----------|----|-------------------|--|
| | | | | | | CUSTOMER | |
| | | | | | | ENPPI | |
| | | | | | | CONST. CONTRACTOR | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | | | |
| <p>REMARKS AND OBSERVATIONS:</p> <p>All tags must be corrected & installed</p> | | | | | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | | | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | | | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | | | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | | | | | |
| 7 | Inspect cables for jacket damage. | | | | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | | | | | |
| 5 | Check identification tags of all conductors and wires. | | | | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | | | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | | | | | |
| 2 | Check cables are correctly fixed to trays and supports. | | | | | | |
| 1 | Construction punch list to be checked. | | | | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. | PL | | |
| <p>PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01)</p> <p>PROJECT NUMBER : 1251-100</p> <p>DISCIPLINE : Electrical</p> <p>SYSTEM NAME : Plant Area lighting and small Power</p> <p>SUB-SYSTEM NAME : System</p> <p>ITEM TAG No. : N3-030-LPDP-LTG</p> <p>AREA : 30</p> <p>REF. DWG's/DOCS :</p> | | | | | | | |
| <p>PRE-COMMISSIONING CHECK LIST</p> <p>MEDIUM VOLTAGE CABLES</p> <p>EL-31 A</p> | | | | | | | |

| | | | | | |
|---|---|----------------------------|--|-------------------------|----------|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | | | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power | | SUB-SYSTEM ID : 030-EL-014 | | | |
| ITEM TAG No. : N3-030-LPDP-LTG | | AREA | | : 30 | |
| REF. DWGS/DOCS : | | | | | |
| No. | | DESCRIPTION | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | | | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | | | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | | | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | | | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | | | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | | | NA | |
| 18 | Calibration test certificate of testing equipment to be checked. | | | NA | |
| REMARKS AND OBSERVATIONS : | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | | CONST. CONTRACTOR | | ENPPI | |
| NAME | | | | Islam Shah | |
| SIGNATURE | | | | | |
| DATE | | | | | |
| CUSTOMER | | | | | |



PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A

INSULATION TEST
EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE [I]

NOTES:

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|--|--|----------------------------|----------|----------|--|-------------------|--|
| DATE | | SIGNATURE | | NAME | | COMPANY | |
| | | | | | | CONST. CONTRACTOR | |
| | | | | | | ENPPI | |
| | | | | | | CUSTOMER | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | | | |
| REMARKS AND OBSERVATIONS: | | | | | | | |
| All tags must be corrected & installed | | | | | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | | | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | | | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | | | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | | | | | |
| 7 | Inspect cables for jacket damage. | | | | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | | | | | |
| 5 | Check identification tags of all conductors and wires. | | | | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | | | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | | | | | |
| 2 | Check cables are correctly fixed to trays and supports. | | | | | | |
| 1 | Construction punch list to be checked. | | | | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. | | | |
| REF. DWGS/DOCS : | | | | | | | |
| ITEM TAG No. : N2-030-LPDP-LTG | | AREA : 30 | | | | | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | | | | | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | | | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | | | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | | | | | |
| PRE-COMMISSIONING CHECK LIST | | | | | | | |
| MEDIUM VOLTAGE CABLES | | | | | | | |
| EL-31 A | | | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : N2-030-LPDP-LTG | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | — | |
| 14 | Inspect cable laid in trenches, segregation and protection. | — | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | — | |
| 16 | Equipment test report and inspection certificate to be checked. | — | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |

NOTES:

TABLE II

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| | | |
| | | |
| | | |
| | | |
| 200 | 5000V | 6.6kV & Above |
| 200 | 2500V | 3.3kV |
| MINIMUM INSULATION RESISTANCE (M.OHMS). | D.C TEST VOLTAGE | CABLE VOLTAGE LEVEL |

EL-31 A

INSULATION TEST

EL-31 A

PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES



| PRE-COMMISSIONING CHECK LIST | | | |
|--|--|----------------------------|-------------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-30A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : NI-030-LPDP-LTG | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | ✓ | |
| 5 | Check identification tags of all conductors and wires. | ✓ | |
| 6 | Check connection, termination and joints of cables are correctly executed. | ✓ | |
| 7 | Inspect cables for jacket damage. | ✓ | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | ✓ | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | ✓ | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | |
| 11 | Tie wraps to be used for cable and wires fixation. | ✓ | |
| REMARKS AND OBSERVATIONS : | | | |
| All tags must be corrected & installed | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | Sobh | Islam Shent | [Signature] |
| DATE | | | |

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|--|---|----------------------------|--|-------------------------|----------|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | | | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | | | |
| ITEM TAG No. : N1-030-LPDP-LTG | | AREA : 30 | | | |
| REF. DWGS/DOCS : | | | | | |
| No. | | DESCRIPTION | | OK/NA/PL | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | / | | | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | / | | | |
| 14 | Inspect cable laid in trenches, segregation and protection. | / | | | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | / | | | |
| 16 | Equipment test report and inspection certificate to be checked. | / | | | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | | | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | | | |
| REMARKS AND OBSERVATIONS : | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | | CONST. CONTRACTOR | | ENPPI | |
| NAME | | | | | |
| SIGNATURE | | | | | |
| DATE | | | | | |



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
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TABLE II

NOTES:

| PRE-COMMISSIONING CHECK LIST | | MEDIUM VOLTAGE CABLES | | EL-3DA | |
|---|--|----------------------------|----------|----------|----------|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | | | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | | | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | | | |
| ITEM TAG No. : NI-030-EPM4-LTG | | AREA : 30 | | | |
| REF. DWGS/DOCS : | | | | | |
| No. | DESCRIPTION | | RESULT | OK/NA/PL | ITEM No. |
| 1 | Construction punch list to be checked. | | ✓ | | |
| 2 | Check cables are correctly fixed to trays and supports. | | ✓ | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | ✓ | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | ✓ | | |
| 5 | Check identification tags of all conductors and wires. | | ✓ | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | ✓ | | |
| 7 | Inspect cables for jacket damage. | | ✓ | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | ✓ | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | ✓ | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | ✓ | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | ✓ | | |
| REMARKS AND OBSERVATIONS: | | | | | |
| All tags must be corrected & installed | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER | | |
| NAME | | Islam Shams | | | |
| SIGNATURE | | | | | |
| DATE | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area Lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area Lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : NI-030-EPM4-LTG | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | ✓ | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |

NOTES:

TABLE (I)

| | | |
|--|------------------|---------------------|
| | | |
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| | | |
| | | |
| | | |
| | | |
| 200 | 5000V | 6.6KV & Above |
| 200 | 2500V | 3.3KV |
| MINIMUM INSULATION RESISTANCE (M.OHMS). | D.C TEST VOLTAGE | CABLE VOLTAGE LEVEL |

EL-31 A

INSULATION TEST

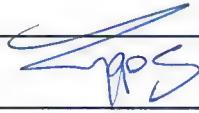

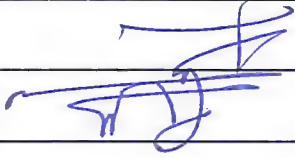
EL-31 A

MEDIUM VOLTAGE CABLES

PRE-COMMISSIONING CHECK LIST



| DATE | | SIGNATURE | | NAME | | COMPANY | |
|--|--|----------------------------|----------|----------|--|-------------------|--|
| | | | | | | CUSTOMER | |
| | | | | | | ENPPI | |
| | | | | | | CONST. CONTRACTOR | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | | | |
| REMARKS AND OBSERVATIONS: All tags must be corrected & installed | | | | | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | | | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | | | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | | | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | | | | | |
| 7 | Inspect cables for jacket damage. | | | | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | | | | | |
| 5 | Check identification tags of all conductors and wires. | | | | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | | | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | | | | | |
| 2 | Check cables are correctly fixed to trays and supports. | | | | | | |
| 1 | Construction punch list to be checked. | | | | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. | | | |
| REF. DWGS/DOCS : | | | | | | | |
| ITEM TAG No. : NI-030-EPM3-LTG | | AREA : 30 | | | | | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | | | | | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | | | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | | | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | | | | | |
| PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A | | | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|---|---|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : NI-030-EPM3-LTG | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL |
| PL | ITEM No. | | |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | ✓ | |
| | | | |
| REMARKS AND OBSERVATIONS : | | | |
| | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

INSULATION TEST

EL-31 A

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|--|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

TABLE II

NOTES:

| DATE | | SIGNATURE | | NAME | | COMPANY | |
|---|--|-----------|----------|--------------|----|-------------------|--|
| | | | | | | CUSTOMER | |
| | | | | Islam Sherif | | ENPPI | |
| | | | | | | CONST. CONTRACTOR | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | | | |
| REMARKS AND OBSERVATIONS: All tags must be corrected & installed | | | | | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | | | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | | | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | | | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | | | | | |
| 7 | Inspect cables for jacket damage. | | | | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | | | | | |
| 5 | Check identification tags of all conductors and wires. | | | | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | | | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | | | | | |
| 2 | Check cables are correctly fixed to trays and supports. | | | | | | |
| 1 | Construction punch list to be checked. | | | | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. | PL | | |
| PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A | | | | | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | | | | | |
| PROJECT NUMBER : 1251-100 | | | | | | | |
| SYSTEM NAME : Plant Area lighting and small Power System | | | | | | | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | | | | | | |
| ITEM TAG No. : NI-030-EPm2-LTG | | | | | | | |
| AREA : 30 | | | | | | | |
| DISCIPLINE : Electrical | | | | | | | |
| SYSTEM ID : 030-EL-014 | | | | | | | |
| SUB-SYSTEM ID : 030-EL-014 | | | | | | | |
| REF. DWGS/DOCS : | | | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|---|---|----------------------------|----------|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : NI-030-EPM2-LTG | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | ✓ | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | ✓ | |
| 14 | Inspect cable laid in trenches, segregation and protection. | ✓ | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | ✓ | |
| 16 | Equipment test report and inspection certificate to be checked. | ✓ | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | ✓ | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**


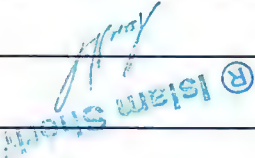
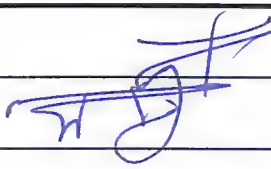
**INSULATION TEST
EL-31 A**

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

TABLE II

NOTES:

| DATE | | SIGNATURE | | NAME | | COMPANY | |
|---|--|-----------|----------|----------|----|----------|--|
| | | | | | | ENPPI | |
| | | | | | | CUSTOMER | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | | | |
| <p>REMARKS AND OBSERVATIONS:</p> <p>All trays must be covered & installed</p> | | | | | | | |
| 11 | Tie wraps to be used for cable and wires fixation. | | / | | | | |
| 10 | Cable markers to be installed before covering buried cables or cables in cable trays. | | / | | | | |
| 9 | Check that the bending radius of cables is not less than the minimum established. | | / | | | | |
| 8 | Ensure that the correct size and type of crimping lugs have been used. | | / | | | | |
| 7 | Inspect cables for jacket damage. | | / | | | | |
| 6 | Check connection, termination and joints of cables are correctly executed. | | / | | | | |
| 5 | Check identification tags of all conductors and wires. | | / | | | | |
| 4 | Check that all cables are installed in accordance with cable lists and approved documents. | | / | | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | | / | | | | |
| 2 | Check cables are correctly fixed to trays and supports. | | / | | | | |
| 1 | Construction punch list to be checked. | | / | | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. | PL | | |
| PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A | | | | | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) PROJECT NUMBER : 1251-100 DISCIPLINE : Electrical SYSTEM NAME : Plant Area lighting and small Power SUB-SYSTEM NAME : Plant Area lighting and small Power SYSTEM ID : 030-EL-014 SUB-SYSTEM ID : 030-EL-014 ITEM TAG No. : N1-030-EPMI-LTG AREA : 30 REF. DWGS/DOCS : | | | | | | | |

| PRE-COMMISSIONING CHECK LIST | | | |
|--|---|---|---|
| MEDIUM VOLTAGE CABLES | | | |
| EL-31 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : NI-030-EPM1-LTG | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 12 | Trench markers to be checked w.r.t approved documents. | — | |
| 13 | Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables. | — | |
| 14 | Inspect cable laid in trenches, segregation and protection. | — | |
| 15 | Cables to be tested (continuity/insulation resistance).(*) | — | |
| 16 | Equipment test report and inspection certificate to be checked. | — | |
| 17 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | |
| 18 | Calibration test certificate of testing equipment to be checked. | N/A | |
| REMARKS AND OBSERVATIONS : | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE |  |  |  |
| DATE | | | |



**PRE-COMMISSIONING CHECK LIST
MEDIUM VOLTAGE CABLES
EL-31 A**

**INSULATION TEST
EL-31 A**

| CABLE VOLTAGE LEVEL | D.C TEST VOLTAGE | MINIMUM INSULATION RESISTANCE (M.OHMS). |
|---------------------|------------------|---|
| 3.3kV | 2500V | 200 |
| 6.6kV & Above | 5000V | 200 |
| | | |
| | | |
| | | |
| | | |
| | | |
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| | | |
| | | |

TABLE II

NOTES:

| No. | | DESCRIPTION | | PL | ITEM No. |
|-----|---|-------------|--|----|----------|
| 1 | Construction punch list to be checked. | ✓ | | | |
| 2 | Check cables are correctly fixed to trays and supports. | ✓ | | | |
| 3 | Check cables through walls or ceilings are correctly sealed. | ✓ | | | |
| 4 | Check that all cables (power/ control) are installed in accordance with cable lists and approved documents. | ✓ | | | |
| 5 | Check identification tags of all conductors and wires. | ✓ | | | |
| 6 | Check connection, tightness, termination and joints of cables are correctly executed. | ✓ | | | |
| 7 | Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs. | ✓ | | | |
| 8 | Check that the bending radius of cables is not less than the minimum established. | ✓ | | | |
| 9 | Cable markers to be installed before covering buried cables or cables in cable trays. | ✓ | | | |
| 10 | Tie wraps to be used for cable and wires fixation. | ✓ | | | |
| 11 | Cable connections shall be torque tested. | ✓ | | | |

| | |
|--|----------------------------|
| REF. DWGS/DOCS : | |
| ITEM TAG No. : 030-LPDP - 1 | AREA : 30 |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | SUB-SYSTEM ID : 030-EL-014 |
| SYSTEM NAME : Plant Area lighting and small Power System | SYSTEM ID : 030-EL-014 |
| PROJECT NUMBER : 1251-100 | DISCIPLINE : Electrical |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | |

| | |
|------------------------------|--|
| PRE-COMMISSIONING CHECK LIST | |
| LOW VOLTAGE CABLES | |
| EL-30 A | |

| | | | |
|---|-------------------|-------|----------|
| REMARKS AND OBSERVATIONS: | | | |
| All tags must be corrected & installed | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |

| | | | | | |
|---|---|---------------------------|----------|--|----|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | | SUB-SYSTEM NAME : Plant Area lighting and small Power System | |
| ITEM TAG No. : 030-LPDP - 1 | | AREA : 30 | | REF. DWGS/DOCS : | |
| No. | | DESCRIPTION | | ITEM No. | |
| 12 | Check that buried cables are correctly covered and protected. | ✓ | OK/NA/PL | RESULT | PL |
| 13 | Trench markers to be checked w.r.t approved documents. | ✓ | OK/NA/PL | RESULT | PL |
| 14 | Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables. | ✓ | OK/NA/PL | RESULT | PL |
| 15 | Inspect cable laid in trenches, segregation and protection. | ✓ | OK/NA/PL | RESULT | PL |
| 16 | Cables to be tested (continuity/insulation resistance). (*) | ✓ | OK/NA/PL | RESULT | PL |
| 17 | Equipment test report and inspection certificate to be checked. | ✓ | OK/NA/PL | RESULT | PL |
| 18 | Check availability of vendor documents, including commissioning and start-up instructions. (If Any) | N/A | OK/NA/PL | RESULT | PL |
| 19 | Calibration test certificate of testing equipment to be checked. | N/A | OK/NA/PL | RESULT | PL |
| REMARKS AND OBSERVATIONS : (*) Refer to table (III). | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | | CONST. CONTRACTOR | | CUSTOMER | |
| NAME | | ENPPI | | NAME | |
| SIGNATURE | | SIGNATURE | | SIGNATURE | |
| DATE | | DATE | | DATE | |

Endu

| INSULATION TEST | | LOW VOLTAGE CABLES | |
|-----------------|------|--------------------|------|
| 1 | 1000 | 1000 | 1000 |
| 2 | 1000 | 1000 | 1000 |
| 3 | 1000 | 1000 | 1000 |
| 4 | 1000 | 1000 | 1000 |
| 5 | 1000 | 1000 | 1000 |
| 6 | 1000 | 1000 | 1000 |
| 7 | 1000 | 1000 | 1000 |
| 8 | 1000 | 1000 | 1000 |
| 9 | 1000 | 1000 | 1000 |
| 10 | 1000 | 1000 | 1000 |
| 11 | 1000 | 1000 | 1000 |
| 12 | 1000 | 1000 | 1000 |
| 13 | 1000 | 1000 | 1000 |
| 14 | 1000 | 1000 | 1000 |
| 15 | 1000 | 1000 | 1000 |
| 16 | 1000 | 1000 | 1000 |
| 17 | 1000 | 1000 | 1000 |
| 18 | 1000 | 1000 | 1000 |
| 19 | 1000 | 1000 | 1000 |
| 20 | 1000 | 1000 | 1000 |
| 21 | 1000 | 1000 | 1000 |
| 22 | 1000 | 1000 | 1000 |
| 23 | 1000 | 1000 | 1000 |
| 24 | 1000 | 1000 | 1000 |
| 25 | 1000 | 1000 | 1000 |
| 26 | 1000 | 1000 | 1000 |
| 27 | 1000 | 1000 | 1000 |
| 28 | 1000 | 1000 | 1000 |
| 29 | 1000 | 1000 | 1000 |
| 30 | 1000 | 1000 | 1000 |
| 31 | 1000 | 1000 | 1000 |
| 32 | 1000 | 1000 | 1000 |
| 33 | 1000 | 1000 | 1000 |
| 34 | 1000 | 1000 | 1000 |
| 35 | 1000 | 1000 | 1000 |
| 36 | 1000 | 1000 | 1000 |
| 37 | 1000 | 1000 | 1000 |
| 38 | 1000 | 1000 | 1000 |
| 39 | 1000 | 1000 | 1000 |
| 40 | 1000 | 1000 | 1000 |
| 41 | 1000 | 1000 | 1000 |
| 42 | 1000 | 1000 | 1000 |
| 43 | 1000 | 1000 | 1000 |
| 44 | 1000 | 1000 | 1000 |
| 45 | 1000 | 1000 | 1000 |
| 46 | 1000 | 1000 | 1000 |
| 47 | 1000 | 1000 | 1000 |
| 48 | 1000 | 1000 | 1000 |
| 49 | 1000 | 1000 | 1000 |
| 50 | 1000 | 1000 | 1000 |
| 51 | 1000 | 1000 | 1000 |
| 52 | 1000 | 1000 | 1000 |
| 53 | 1000 | 1000 | 1000 |
| 54 | 1000 | 1000 | 1000 |
| 55 | 1000 | 1000 | 1000 |
| 56 | 1000 | 1000 | 1000 |
| 57 | 1000 | 1000 | 1000 |
| 58 | 1000 | 1000 | 1000 |
| 59 | 1000 | 1000 | 1000 |
| 60 | 1000 | 1000 | 1000 |
| 61 | 1000 | 1000 | 1000 |
| 62 | 1000 | 1000 | 1000 |
| 63 | 1000 | 1000 | 1000 |
| 64 | 1000 | 1000 | 1000 |
| 65 | 1000 | 1000 | 1000 |
| 66 | 1000 | 1000 | 1000 |
| 67 | 1000 | 1000 | 1000 |
| 68 | 1000 | 1000 | 1000 |
| 69 | 1000 | 1000 | 1000 |
| 70 | 1000 | 1000 | 1000 |
| 71 | 1000 | 1000 | 1000 |
| 72 | 1000 | 1000 | 1000 |
| 73 | 1000 | 1000 | 1000 |
| 74 | 1000 | 1000 | 1000 |
| 75 | 1000 | 1000 | 1000 |
| 76 | 1000 | 1000 | 1000 |
| 77 | 1000 | 1000 | 1000 |
| 78 | 1000 | 1000 | 1000 |
| 79 | 1000 | 1000 | 1000 |
| 80 | 1000 | 1000 | 1000 |
| 81 | 1000 | 1000 | 1000 |
| 82 | 1000 | 1000 | 1000 |
| 83 | 1000 | 1000 | 1000 |
| 84 | 1000 | 1000 | 1000 |
| 85 | 1000 | 1000 | 1000 |
| 86 | 1000 | 1000 | 1000 |
| 87 | 1000 | 1000 | 1000 |
| 88 | 1000 | 1000 | 1000 |
| 89 | 1000 | 1000 | 1000 |
| 90 | 1000 | 1000 | 1000 |
| | | | |

[illegible]

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| TABLE III |
|-----------|

NOTES:

Manufacturer's test voltage & minimum values for insulation resistance should be referenced.

| PRE-COMMISSIONING CHECK LIST | | | |
|---|--|----------------------------|----------|
| SOCKETS | | | |
| EL-24 A | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrod Area 30 (Module-01) | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power System | | SYSTEM ID : 030-EL-014 | |
| SUB-SYSTEM NAME : Plant Area lighting and small Power System | | SUB-SYSTEM ID : 030-EL-014 | |
| ITEM TAG No. : 030-LPDP - 1 | | AREA : 30 | |
| REF. DWGS/DOCS : | | | |
| No. | DESCRIPTION | RESULT | ITEM No. |
| 1 | Construction punch list to be checked. | ✓ | |
| 2 | Check to ensure that all the sockets fittings meet the requirement of Hazardous area classification. | ✓ | |
| 3 | Check location and fixing method of sockets in accordance with approved drawings. | ✓ | |
| 4 | Inspect sockets for mechanical damage. | ✓ | |
| 5 | Check that sockets are correctly located and not obstructed by other equipments. | ✓ | |
| 6 | Check equipment fixings and mountings are secure. | ✓ | |
| 7 | Check cable circuit connections to sockets against the approved drawing. | ✓ | |
| 8 | Check circuit numbering and correct identification label. | ✓ | |
| 9 | Check sockets inside & outside cleaning. | ✓ | |
| 10 | Check sockets for sealing & tightening. | ✓ | |
| 11 | Earthing connections to the earthing grid to be checked. | ✓ | |
| REMARKS AND OBSERVATIONS : | | | |
| All tags must be corrected & installed | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER |
| NAME | | | |
| SIGNATURE | | | |
| DATE | | | |


| | | | | | | | | |
|---|--|-------------------|-----------------|--------------------|--|------------------------|--|-----------------|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | | | | | | |
| PROJECT NUMBER | : 1251-100 | DISCIPLINE | : Electrical | SYSTEM NAME | : Plant Area lighting and small Power System | SUB-SYSTEM NAME | : Plant Area lighting and small Power System | |
| ITEM TAG No. | : 030-LPDP - I | AREA | : 30 | | | | REF. DWGS/DOCS | : |
| | | | | | | | | |
| No. | DESCRIPTION | | | | | | OK/NA/PL | ITEM No. |
| 12 | Plugs of socket outlets fit properly and mechanical interlocks operate correctly. | | | | | | ✓ | |
| 13 | Junction boxes are well sealed and holes that are not used to be plugged with plugs suiting hazardous area classification. | | | | | | ✓ | |
| 14 | Contractor marked up drawings is available. | | | | | | ✓ | |
| | | | | | | | | |
| REMARKS AND OBSERVATIONS : | | | | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | | | | |
| COMPANY | CONST. CONTRACTOR | ENPPI | CUSTOMER | | | | | |
| NAME | | | | | | | | |
| SIGNATURE | | | | | | | | |
| DATE | | | | | | | | |

| DATE | | SIGNATURE | | NAME | | COMPANY | |
|---|--|----------------------------|----------|----------|----|-------------------|--|
| | | | | | | CUSTOMER | |
| | | | | | | ENPPI | |
| | | | | | | CONST. CONTRACTOR | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | | | |
| REMARKS AND OBSERVATIONS: All tags must be corrected & installed | | | | | | | |
| 11 | Check lighting fixture/junction box for sealing & tightening. | ✓ | | | | | |
| 10 | Check lighting fixture inside & outside cleaning. | ✓ | | | | | |
| 9 | Earthing connections to the earthing grid to be checked. | ✓ | | | | | |
| 8 | Check circuit numbering and correct identification label. | ✓ | | | | | |
| 7 | Check equipment fixings and mountings are secure. | ✓ | | | | | |
| 6 | Check equipment fixings and mountings are secure. | ✓ | | | | | |
| 5 | Check that lighting equipments are correctly located and not obstructed by other equipments. | ✓ | | | | | |
| 4 | Inspect light fittings for mechanical damage. | ✓ | | | | | |
| 3 | Check location and fixing method of light fittings in accordance with approved drawings. | ✓ | | | | | |
| 2 | Check to ensure that all the fittings meet the requirement of Hazardous area classification. | ✓ | | | | | |
| 1 | Construction punch list to be checked. | ✓ | | | | | |
| No. | DESCRIPTION | RESULT | OK/NA/PL | ITEM No. | PL | | |
| REF. DWGS/DOCS : | | | | | | | |
| ITEM TAG No. : 030-LPDP - 1 | | AREA : 30 | | | | | |
| SUB-SYSTEM NAME : System | | SUB-SYSTEM ID : 030-EL-014 | | | | | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | | | | | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | | | | | |
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | | | | | | |
| PRE-COMMISSIONING CHECK LIST LIGHTING AND SMALL POWER MATERIAL EL-23 A | | | | | | | |

| | | | | | |
|--|--|--|--|---|--|
| PROJECT TITLE : EDPCCrude Oil Tank Farms Project, Agrood Area 30 (Module-01) | | PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | | SUB-SYSTEM NAME : Plant Area lighting and small Power | |
| SYSTEM TAG No. : 030-LPDP - 1 | | AREA : 30 | | REF. DWGS/DOCS : | |
| PROJECT NUMBER : 1251-100 | | DISCIPLINE : Electrical | | SYSTEM ID : 030-EL-014 | |
| SYSTEM NAME : Plant Area lighting and small Power | | SYSTEM ID : 030-EL-014 | | SUB-SYSTEM NAME : Plant Area lighting and small Power | |
| ITEM TAG No. : 030-LPDP - 1 | | AREA : 30 | | REF. DWGS/DOCS : | |
| No. | | DESCRIPTION | | OK/NA/PL | |
| 12 | | Junction boxes are well sealed and holes that are not used to be plugged with plugs | | ✓ | |
| 13 | | Connection of photo-cells to be checked as per approved documents. | | ✓ | |
| 14 | | Check the lighting fixtures are installed in such a way that the maintenance become easily & safely. | | ✓ | |
| 15 | | Refer to small power distribution panel checks. | | ✓ | |
| 16 | | Contractor marked up drawings is available. | | N/A | |
| REMARKS AND OBSERVATIONS : | | | | | |
| OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST. | | | | | |
| COMPANY | | CONST. CONTRACTOR | | ENPPI | |
| NAME | | SIGNATURE | | DATE | |
| CUSTOMER | | | | | |


12.11- Electrical Supplier Check Lists & Reports



| | | |
|--------------------|--|--|
| System ID | | 030-EL-014 |
| System Description | | Plant Area lighting and small Power System |





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Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



| | |
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| <div> <div>  </div> <div> <div> Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA) </div> <div>  </div> </div> </div> | |
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |
| <div> <div>13- Electrical Commissioning</div> </div> | |

| | |
|---|--|
| <div><div>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div><div><div>المجلس الأعلى للنفط Ministry of Oil</div></div></div> | |
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |

13.01- Electrical -Commissioning Check Lists

| | | | | | |
|--|--|-----------|------------|--------------------|--|
| <div><div>Enppi PETROJET</div><div>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div><div></div></div> | | System ID | 030-EL-014 | System Description | Plant Area lighting and small Power System |
| <div>13.02- Electrical Supplier Check Lists & Reports</div> | | | | | |

14- Red Marked-up Drawings

| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |




Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



14.01- P&ID


| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |



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14.02- Instrumentation Drawings

| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



14.03- Electrical Drawings

| | |
|--------------------|--|
| System ID | 030-EL-014 |
| System Description | Plant Area lighting and small Power System |



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)

